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Show Me the Money: an Analysis of the Impact of Voter Recognition on the Campaign Spending Effects of House and Senate Candidates.

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**SHOW ME THE MONEY:
AN ANALYSIS OF THE IMPACT OF VOTER RECOGNITION
ON THE CAMPAIGN SPENDING EFFECTS OF
HOUSE AND SENATE CANDIDATES**

A Dissertation

**Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy**

in

The Department of Political Science

by

Nicholas Chad Long

B.A., Northeast Louisiana University, 1993

M.A., Louisiana State University, 1998

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**Don't tell me that the rich don't know,
Sooner or later it all comes down to money.**

--Bruce Springsteen

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ABSTRACT

The focus of this dissertation is campaign spending in congressional elections. I examine the benefits that candidates receive from campaign expenditures. I think that challengers receive greater benefits from spending than incumbents, but that the extent of these benefits depends on the type of challenger. High-quality challengers are those that have previous experience in an important elective office, while low-quality challengers lack this experience.

Because of this experience, high-quality challengers enjoy a higher level of recognition among the electorate than low-quality challengers. I think that the benefits that challengers receive from expenditures are inversely related to the level of recognition that voters have of these challengers, so that low-quality challengers should receive greater benefits from spending than high-quality challengers. I call this the voter recognition theory.

The voter recognition theory applies equally well to elections for the House and Senate. Incumbents from both chambers maintain high levels of recognition among the electorate, so the difference in spending benefits between incumbents and challengers is determined by the quality of challengers. The Senate is the more prestigious of the two chambers. Consequently, I think that Senate elections attract more high-quality challengers than House elections. Low-quality challengers should receive much higher benefits than incumbents, while high-quality challengers should receive benefits that are roughly equal to incumbents. Thus, I think that the difference in spending benefits between incumbents and challengers is smaller in Senate elections than in House elections.

In order to test these assumptions, I collect data for House and Senate elections from 1974 to 1994. Besides the main variables of interest--candidate spending and challenger political quality--I examine other relevant variables, such as party

identification, incumbent controversy, challenger celebrity, and state unemployment level. My analysis of these variables includes descriptive statistics and multiple regression.

Virtually all of the results support my key assumptions. The difference in spending benefits between incumbents and challengers is smaller in Senate elections because these elections have more high-quality challengers. Several interesting areas are available for future research, and the voter recognition theory provides a valid framework within which to conduct this research.

CHAPTER ONE: INTRODUCTION

If you close your eyes and try hard enough, you can imagine the nation's elected officials standing shoulder-to-shoulder and singing this line in glorious unison in front of the United States Capitol. The importance of money in elections, especially those for national office, has become one of the undisputed truisms of American politics over the past two decades. While political scientists often dispute the traditional wisdom emanating from the vestibules of power, the case of campaign spending provides an instance where the scholarly evidence seems to support the "real world" assumptions. Numerous studies have shown that campaign expenditures have both a direct and an indirect impact on the actual vote in legislative elections.

This impact is available to incumbents and challengers, to Democrats and Republicans, and to candidates for the House of Representatives and the Senate. The inclusive nature of money's influence has caused all serious candidates to respond to its siren call. Candidates who allow that call to go unheeded risk exposing themselves to opponents who have not. Candidates feel an urgent need to maintain an approximate parity with their opponents in order to sustain their own campaigns and present themselves as viable candidates.

This environment of financial brinkmanship seems to mirror the international security dilemma of an upwardly spiraling arms race (Sorauf, 1988). A huge discrepancy in campaign war chests leads to a perceived instability in the contest. Candidates who are disadvantaged make a concerted effort to match their opponents' level of spending in order to achieve balance in the contest. Of course, this aggressive proliferation of campaign funds will be viewed by the previously advantaged candidates as a threat to their electoral security, so that they must also increase their funds. This

pattern of escalation continues unabated. Unlike the international arena, however, the domestic electoral system provides for a peaceful end-game known as an election.

With almost all candidates increasingly relying on huge inflows of cash in order to wage competitive campaigns, the overall cost of running for office has naturally increased. The average cost per candidate for a House campaign in 1978 was \$109,440, while in 1998 that figure jumped to \$472,468. The average cost per candidate for a Senate campaign has rocketed from \$951,405 in 1978 to \$3.48 million in 1998. As mentioned above, both parties have exhibited these increases. House Democrats went from spending an average of \$108,986 in 1978 to \$426,974 in 1998; House Republicans went from \$109,995 in 1978 to \$517,730 in 1998. In the upper chamber, Democratic candidates spent an average of \$762,831 in 1978 and \$3.30 million in 1998; Republicans went from \$1.15 million in 1978 to \$3.67 million in 1998 (Ornstein, Mann, and Malbin, 1996: 81 & 85).¹ The explosion of campaign costs and its related consequences concern both scholars and politicians.

THE RISING COST OF CONGRESSIONAL CAMPAIGNS

Explanations

There are three plausible reasons why costs have increased over the past two decades. The first, and simplest, explanation is that candidates have more people that they must try to contact today than in the past. The population size of their geographic constituencies (Fenno, 1979) has gotten larger.

This is especially apparent in the House of Representatives. When Congress passed legislation in 1911 fixing the number of seats in the House at 435, it guaranteed that a burgeoning national population would translate into larger district populations, since more seats could not be added to keep the representative-to-people ratio fairly low. As a result, the mean population in congressional districts has steadily increased through the years. In 1910, the mean population was 212,019; in 1950, it was 347,875;

by 1980 it had increased to 520,794; as of 2000, it stands at 626,875 people. This increase in the size of legislative constituencies necessarily places greater financial burdens on House members and senators when they try to reach those constituents in a campaign.

This leads to the second explanation for increased costs. A primary medium that candidates use to reach vast numbers of people is television. Television advertising has become a staple of most congressional campaigns and virtually all senate campaigns. A large number of observers, including politicians, point to this as a reason for escalating campaign costs. Many candidates believe that getting their messages out on the airwaves is the most efficient means of communication with voters, particularly in sizable districts or states where personal contact with a significant number of voters is impossible (Goldenberg and Traugott, 1984: 120). Even when television ads might not be very efficient, such as in districts in large metropolitan areas, many candidates still perceive the need to resort to this tactic. The feeling that television advertising is essential regardless of price is an important force in driving up costs (Jacobson, 1992: 83).

One must be careful, though, not to overstate the culpability of television for this situation. While electronic media advertising is the single most expensive expenditure in campaigns, it does not comprise anywhere near the percentage of total campaign spending claimed by some observers. For instance, in 1990 House races only 19.5 percent of the total budget was allocated for television, while in 1990 Senate races that figure was 32.6 percent (see Tables 1.1 and 1.2). These figures clash sharply with the conventional wisdom, supported by some research findings, that campaigns devote well over half of their total expenditures to television advertising.²

A study published in September 1990 by the Congressional Research Service (CRS) set the level of spending on broadcast advertising at 39.5 percent for House races

Table 1.1 Breakdown of Campaign Expenditures for 1990 House Races

Major Category	Incumbents	Challengers
Overhead	\$108,049 (27.68)	\$36,614 (27.48)
Fund Raising	\$69,053 (17.69)	\$11,732 (8.81)
Polling	\$11,178 (2.86)	\$3,615 (2.71)
Advertising*	\$87,703 (22.47)	\$41,581 (31.21)
Constituent Gifts/ Entertainment	\$6,741 (1.73)	\$21 (.02)
Donations to Parties & Other Candidates	\$26,492 (6.79)	\$299 (.22)
Other Campaign Activity	\$66,929 (17.14)	\$34,964 (26.24)
Unitemized Expenses	\$14,243 (3.65)	\$4,406 (3.31)
Total Expenditures	\$390,387 (100.00)	\$133,231 (100.00)

Note: Dollar figures are averages. Percentages are in parentheses. Totals are for the entire two-year cycle.

* Advertising is further disaggregated into electronic media (\$76,109--19.50%) and other media such as radio and newspapers (\$11,594--2.97%).

Source: *Gold-Plated Politics* by Sara Fritz and Dwight Morris (pgs. 14-15 & 18-19).

Table 1.2 Breakdown of Campaign Expenditures for 1990 Senate Races

Major Categories	Incumbents	Challengers
Overhead	\$964,194 (23.51)	\$443,188 (26.28)
Fund Raising	\$1,264,985 (30.84)	\$327,064 (19.39)
Polling	\$132,406 (3.23)	\$36,387 (2.16)
Advertising*	\$1,365,372 (33.29)	\$702,682 (41.66)
Constituent Gifts/ Entertainment	\$30,038 (.73)	\$649 (.04)
Donations to Parties & Other Candidates	\$60,008 (1.46)	\$2,847 (.17)
Other Campaign Activity	\$244,721 (5.97)	\$152,888 (9.06)
Unitemized Expenses	\$39,597 (.97)	\$20,906 (1.24)
Total Expenditures	\$4,101,338 (100.00)	\$1,686,616 (100.00)

Note: Dollar figures are averages. Percentages are in parentheses. Totals are for the entire six-year cycle.

* Advertising is further disaggregated into electronic media (\$1,336,206--32.58%) and other media such as radio and newspapers (\$29,166--.71%).

Source: *Gold-Plated Politics* by Sara Fritz and Dwight Morris (pgs. 16-17 & 20-21).

and 53.5 percent for Senate races. The CRS is a respected branch of the Library of Congress that provides members of Congress and committees with information. The skewed nature of the information in this report could be attributed to the methodology employed. The findings were based on questionnaires filled out by major party candidates in competitive races in the 1988 election.³

The information contained in Tables 1.1 and 1.2 is the result of an exhaustive analysis of all 437,753 separate expenditures reported to the Federal Election Commission (FEC) by 972 candidates who sought congressional office in 1990. Sara Fritz and Dwight Morris, two reporters for the *Los Angeles Times*, placed each of these expenditures into 1 of 220 different categories, using interviews with campaign officials and consultants to clarify any ambiguities. The results show that the conventional wisdom has been "wildly exaggerated" (Fritz and Morris, 1992: 125).

So while television is certainly one cause of increased costs, it is by no means the primary cause. This calls into question the logic of those who claim that a reduction in television advertising rates will lead to a reduction in campaign spending, and thus a lessening of the insatiable appetite for money. As Fritz and Morris (1992: 126) write,

Television discounts undoubtedly would help to lower campaign costs....But it probably would not create the huge windfall anticipated by some proponents of cut-rate media. Nor would it necessarily bring down overall campaign costs. On the contrary, if broadcast costs were lowered, members of Congress would probably invest the savings either in buying more television time or in building a stronger, more elaborate permanent campaign organization.

That last phrase points to the third, and perhaps paramount, explanation for increased costs. The candidate-centered nature of modern congressional campaigns has contributed to the increased role of money. There have been numerous studies pointing to the decline of parties and the rise of personal organizations as sources of influence in

campaigns (Abramowitz, 1980; Fiorina, 1981; Hinckley, 1980; McAdams and Johannes, 1983; Mann and Wolfinger, 1980; Wattenberg, 1994). As Cain, Ferejohn, and Fiorina (1987: 10) note,

...the activities and characteristics of the candidates have increased in significance in recent years....And they [incumbents] are better known and more favorably evaluated because, among other factors, they bombard constituents with missives containing a predominance of favorable material, maintain extensive district office operations to service their constituencies, use modern technology to target groups of constituents with particular policy interests, and vastly outspend their opponents.

While the above quote focuses on the activities of incumbents, challengers have also learned how to cultivate supporters by focusing on their own personal characteristics. Should they gain office, they are then more comfortable using the aforementioned activities to keep these supporters. This personal constituency must be nurtured, and politicians find that a green thumb is as important to ensuring a healthy constituency as it is to ensuring a healthy garden. Since the traditional party apparatus that could help link candidate to constituency through organizational structures--as well as keep that constituency loyal through the use of patronage--has partly eroded, candidates are often left to their own devices in maintaining an electoral coalition. This increases candidates' need for money.

This need for campaign funds to maintain a personal fiefdom has precipitated the rise of another phenomenon: the permanent campaign. There are no longer clearly delineated lines between campaign periods and governing periods. The candidate-centered organization requires that elected officials constantly pursue the financial means with which to keep that organization viable; they have no one to rely on but themselves. The incessant fund-raising combined with coalition-maintenance duties places officials in constant campaign mode. In the House, this condition is even further exacerbated by the paltry length of time between elections. All of the above leads to a

prevailing view that one must stay on the campaign trail in order to ensure reelection. So if for no other reason, the sheer length of the permanent campaign will heighten costs.

Consequences

The rising cost of congressional campaigns is not an abstract phenomenon, but has concrete implications for those who practice the daily art of democracy. Public officials, and those who assist them, must face the realities of a system in which money has assumed a leading role. For quite a few, this reality is not very pleasant. The money-dominated campaign has altered the way many officials view their roles. The things that they must do to get elected, as well as the way that they must allocate their time once in office concerns many officials.

Perhaps the single most frequently heard complaint among politicians is that they must dedicate such a vast amount of time to fundraising. Not only do many feel that this is a degrading process, but also that it detracts from the more important functions of policymaking and constituent service. In recent years, several highly regarded members of Congress have pointed to this as one of the major drawbacks to public office.

The phenomenon of rising costs also affects the way that citizens view the relationships that occur in the corridors of power. It is no secret that, among American political institutions, Congress routinely receives some of the lowest public approval ratings. Hibbing and Theiss-Morse (1995: 6, 38-39) write,

Historically, people have liked to dislike politicians, and especially members of Congress....In the quarter-century since [1971], support for Congress has always been between 8 and 28 percent; support for the Court between 22 and 40 percent; and support for the presidency between 11 and 42 percent. These numbers suggest that support is far from static but also that it is largely locked into a reasonably constrained low level for all institutions, particularly Congress.

More recent numbers from a Gallup poll in September 1999 show support for Congress at 37 percent. With these anemic numbers, Congress certainly wants to avoid the emergence of any issues that would serve to cast aspersions on the conduct of its duties. But just such an issue has emerged in recent years.

That issue centers on the growing influence of special-interest groups in the political system. These groups exert financial influence on candidates through the use

Table 1.3 The Growth of PAC Contributions to Congressional Candidates, 1974-94

Year	Corporate	Labor	Trade/Health	Nonconnected	Other	Total*
1974	2.5**	6.3	2.3	—	1.4	37.6
1976	7.1	8.2	4.5	—	2.8	58.9
1978	9.5	9.9	11.2	2.5	1.0	77.5
1980	19.2	13.2	15.9	4.9	2.0	99.3
1982	27.5	20.3	21.9	10.7	3.2	128.4
1984	35.5	24.8	26.7	14.5	3.8	150.2
1986	46.2	29.9	32.9	18.8	4.9	179.4
1988	50.5	33.9	38.9	19.2	5.5	185.3
1990	53.5	33.6	42.5	14.3	6.5	169.6
1992	64.1	39.3	51.1	17.3	6.5	186.1
1994	64.1	40.6	50.1	17.3	6.6	178.8

* Adjusted for inflation, 1994=1.00.

** In millions of dollars.

Source: *The Politics of Congressional Elections*, 4th ed. by Gary Jacobson (pg. 56).

Table 1.4 Sources of Campaign Contributions to House and Senate Candidates, 1974-94

	Percentage of Contributions from:				
	Individuals	Parties	PACs	Candidates*	Unknown
House					
1974	73	4	17	6	---
1976	59	8	23	9	---
1978	61	5	25	9	---
1980	67*	4	29	---	---
1982	63*	6	31	---	---
1984	51	3	39	6	---
1986	52	2	39	7	---
1988	49	2	43	6	---
1990	48	1	44	7	---
1992	50	1	39	10	---
1994	54	1	37	8	---
Senate					
1972	67	14	12	0.4	8
1974	76	6	11	1	6
1976	69	4	15	12	---
1978	70	6	13	8	---
1980	78*	2	21	---	---
1982	81*	1	18	---	---
1984	68	1	20	11	---
1986	69	1	25	6	---
1988	68	1	26	6	---
1990	70	1	24	5	---
1992	68	1	25	6	---
1994	61	1	17	22	---

* Includes candidates' contributions to their own campaigns.

Source: *The Politics of Congressional Elections*, 4th ed. by Gary Jacobson (pg. 55).

of associated political action committees. Political action committees (PACs) are a main source of the influx of money into modern congressional campaigns. The amount of PAC contributions to congressional candidates has increased from \$37.6 million in 1974 to a whopping \$178.8 million in 1994. PAC contributions constituted about 37% of House candidates' receipts and about 17% of Senate candidates' receipts in the 1994 elections (see Tables 1.3 and 1.4).

Certainly PACs are not solely to blame. The campaign spending reforms of the mid-1970s allow huge contributions to be funneled through the two major parties in the form of "soft money." They also permit a practice known as "bundling," whereby an individual skirts around the spending limits by bundling together numerous modest contributions; in reality, individuals can garner just as much influence through large donations as they can in the days prior to contribution limits. PACs, though, seem to attract much derision due to the fact that their sole stated purpose for existence is to persuade lawmakers to vote a certain way on specific issues. This often leads to the public perception that PACs cause conflicts between the national good and personal gains.

A dramatic manifestation of this conflict is found in a quote by Rep. Glenn Poshard, D-Ill.,

In 1988, I came to Washington, D.C. and I went from PAC to PAC to PAC. At every stop, they asked me to fill out a questionnaire: "On House Bill X, will you vote yes or no?" You not only have to pledge to support their position on these bills, but you have to sign your name to them.

Now [after being elected] the bell rings in your office at 11:00 a.m. Tuesday morning and now you understand how it [the bill] affects the nation. Your guts start being torn apart because you signed a form a year ago during the campaign saying you'd vote the other way. Now you understand the issue and it comes in conflict with what you told them you would do a year ago. This is a rage inside you.

You walk onto the floor and you know that if you vote their way, they will announce it in their PAC newsletters, and next time you won't even have to beg

for money, or you can do what in your heart you think is right. That happened to me three or four times in a row and I told my AA [administrative assistant], "I can't do this anymore." I'm not going to take any PAC funds. I want to be free to vote how I want to vote (Fritz and Morris, 1992: 171-72).

Some candidates might perceive that a refusal to accept PAC contributions is too risky, since it might make them more electorally vulnerable. Certainly for incumbents, PAC funds are a potent way to ensure reelection. As Bennett (1996: 140) writes, "...the deluge of PAC money allows incumbents to keep their seats by greatly outspending their opponents (by a 2 to 1 margin in the Senate and a 3.5 to 1 margin in the House in recent elections)." Ironically, the fact that all of this PAC information is open and available for public scrutiny may also add to the negative perception of PACs. Those "fat-cat" contributors who gain leverage through bundling, for example, are usually not subjected to the same level of scrutiny by the media or public advocacy groups.

So, many politicians believe that the escalating cost of campaigns forces them to resort to a degrading ritual of attending endless fundraisers with their hats in hand. This distracts them from the more noble pursuits of policy deliberation and constituent service. And many citizens feel that the escalating cost of campaigns creates an environment where special-interest groups exercise undue influence on their elected officials. In the minds of many citizens, politicians have sold their collective soul to the proverbial devil in order to secure electoral survival; in this instance, the devil takes the form of an expensively tailored K-Street lobbyist. All of this negativity is the result of the powerful impact that campaign spending has on elections. This powerful impact causes candidates to try to raise and spend as much money as possible. But does the scholarly evidence support this assertion?

CONVENTIONAL WISDOM VERSUS SCIENTIFIC EVIDENCE

There are numerous instances where beliefs held by professional politicians and reported by journalists are contradicted by evidence unearthed by political scientists. It seems that those embroiled in the daily maelstrom of political events may be denied the perspective achieved by scholars working in a calmer, more objective atmosphere. It also appears that the narrow and esoteric nature of much social science research might prohibit a large percentage of the public from detecting and understanding that work. In the absence of this countervailing force, the opinions of the politicians hold sway; thus, the emergence of a conventional wisdom.

The task of political scientists in this situation should be to find a way of making their research more accessible—which is not synonymous with "dumbed down"—so that the public can weigh the two alternatives, and the erroneous conventional wisdom can begin to be eroded. Assuming that the scientific methods employed are sound and the research is thorough, the light of reason should shine through. Many might argue that such debates are irrelevant because the outcome of the debates will not significantly alter the political landscape. Some of the issues around which this type of "conventional wisdom versus scientific evidence" conflict exists are important, and a shift in recognition would certainly equal a shift in public dialogue.

Campaign spending is just such an issue. Determining the legitimacy of the conventional wisdom—that spending affects elections—is important in terms of guiding the continued construction of a research agenda. An understanding of the effects of campaign spending is also vital to an informed public dialogue on campaign finance reform. This assumes that the conventional wisdom is supported by research, for if the data demonstrate that spending does not have an impact, then the whole enterprise is pure folly.

The entire campaign house of cards is built upon a logic that crumbles if the last sentence is true. If campaign expenditures do not have an effect on the vote, then there is no reason for candidates to raise and spend such vast amounts of funds. And if candidates need not raise and spend such vast amounts of funds, then modern campaigns need not have such exorbitant costs. And if the above assumptions are true, then the wrangling over campaign finance reform need not continue. The key to lowering costs will simply be to inform candidates of the futility of relying on heavy spending; implementing complex bureaucratic roadblocks will be unnecessary.

But if the data demonstrate that spending does have an impact, then further sober reflection is required. Candidates would be behaving rationally, inasmuch as there is a positive utility associated with the expenditure of funds. In this circumstance, lowering costs is not a matter of enlightening the ignorant, since the ignorant actually know what they are talking about. Instead, restraints would need to be placed on the political animals in the form of substantive reforms. The benefits derived from a spending superiority eliminates the possibility of candidates unilaterally disarming their fundraising operation. So more impartial, objective minds will need to devise ways to reform the system that is fair to all.

It is clear that the issue of campaign spending is an important one. Do expenditures affect the vote? Do candidates benefit from outspending their opponents? Do some candidates benefit more than others? Do constituency and chamber differences affect which candidates benefit more from spending? All of these questions and more prove pivotal in any discussion of this subject. Resolving these questions is crucial to properly directing the discourse on this subject. It is the goal of this dissertation to contribute to the ongoing process of resolving these questions.

OVERVIEW

The central focus of this dissertation is campaign spending in congressional elections. Specifically, I examine the effect of candidate expenditures on the vote. This is a topic that has been explored often in previous studies, but the combination of conflicting results and as yet untraveled terrain invites further exploration. I hope to add to this research agenda by bringing a fresh perspective to some previous findings, and by examining areas that have heretofore been relatively ignored.

Previous Findings: The Majority

The one key conclusion that is reached in virtually all of the studies in this area is that challengers receive greater marginal benefits from campaign expenditures than incumbents. Simply put, challengers get a bigger bang for their buck. The reason for this is fairly straightforward. The most important thing that campaign money buys for candidates is visibility and recognition. Whether it be via television ads, radio ads, newspaper ads, billboards, yard signs, bumper stickers, fliers, brochures, telephone calls, or town hall meetings--candidates are primarily concerned with getting known.

Candidates who are unknown to the electorate are losing candidates. The risk of loss prompts candidates to be proactive in their drive toward visibility among voters. It is not enough to sit back and hope that news reports and word-of-mouth will provide adequate publicity to attract voters. In order to gain attention, candidates must take the initiative and spend money. In Seussian terms, if you do not have the green, you will not be seen.

Now, while it is certainly true that all candidates seek recognition, it is equally true that one set of candidates start out with an advantage in this regard. On the whole, incumbents are better known than challengers. This initial incumbent advantage makes attaining awareness among voters even more of an imperative for challengers. Since

the various weapons used by entrenched incumbents are not available to challengers, other means are necessary for achieving this imperative. Money is crucial in allowing challengers to even the playing field.

It now becomes clear why challengers receive greater marginal benefits. They have more ground to cover in a campaign, and hence their spending buys more. \$10,000 spent by a challenger languishing in obscurity is going to yield far more in the way of building voter recognition than \$10,000 spent by an incumbent who has already saturated the district with his name and image in previous elections. All candidates eventually fall prey to the law of diminishing returns. There is only so much recognition that candidates can achieve, and at higher levels the campaign dollar is going to yield less and less. The initial disparity in voter awareness between incumbents and challengers means that incumbents succumb to diminishing returns sooner.

Again, this conclusion about greater challenger spending effects is found throughout the literature. There are disagreements over how much incumbent and challenger spending effects differ, but there is little disagreement over the fact that a difference exists. There are disagreements over the exact process by which challengers receive these benefits, but these debates over causal processes do not nullify the underlying assumption. Almost all scholars are in agreement about this finding--almost all.

Previous Findings: The Minority

Perhaps the specter of a whole subset of political scientists marching in lock-step to the same beat was more than some could bear. So in an act of academic contrariness, one lone voice dared to dissent, and in the discipline's most prominent journal no less. In a 1998 article published in the *American Political Science Review*,

Alan Gerber examines the expenditures of Senate candidates, and what impact those expenditures had on each election outcome. He finds that incumbent and challenger spending effects are roughly equal, and if anything, *incumbents* receive greater marginal benefits. He uses his results to directly attack the opposite conclusions reached in earlier studies, and the logic behind those conclusions.

In fact, Gerber's results may actually strengthen the underlying logic concerning candidate visibility. If so, both his results and the opposite results presented in other articles can both exist and be explained by this single voter recognition theory. The reason for this is the different electoral environments within which Senate and House candidates operate.

The Voter Recognition Theory

The Senate is the more prestigious of the two chambers. Thus, Senate elections tend to be more competitive than House elections. One of the main determinative factors for a competitive election is the quality of the challenger. Simply, Senate challengers tend to be of a higher quality than House challengers. One of the main attributes of high-quality challengers is that they have an established reputation among the electorate; this reputation may come from having previously held another important elective office, from being a celebrity figure, etc. Thus, Senate challengers tend to be more well-known than House challengers by the electorate.

If the above statements are true, then it stands to reason that there should be less of a disparity in candidate recognition/voter awareness among incumbents and challengers in Senate elections than among incumbents and challengers in House elections. And since this disparity helps create differential spending effects, Senate challengers should not receive as big a bang for their buck relative to Senate incumbents as do House challengers relative to House incumbents. The same logic applies to the different environments that exist in elections for the two chambers.

CONCLUSION

The following pages contain a more detailed and comprehensive explication of the ideas presented in this overview. Chapter Two contains a review of the relevant literature. In Chapter Three, I present the theory which guides this study. In Chapter Four, I explain the data and methods used to test the theory. In Chapter Five, I provide a descriptive analysis of the data. In Chapters Six and Seven, I present in-depth analysis of regression results for Senate and House elections respectively. In Chapter Eight, I summarize all of the key results and describe how they support the theory.

END NOTES

- 1) The figures for 1998 were calculated from data obtained from an FEC report. I used the same method of calculation as the cited authors. These figures do not control for inflation.
- 2) Relying on one election year to draw conclusions about a more general trend is certainly not an optimal approach, but as in much social science research, optimality must give way to practicality. The herculean task of analyzing and categorizing all of the separate expenditure reports makes it virtually impossible for me to add any additional years. I am not a full-time journalist with the vast resources of the *Los Angeles Times* at my disposal. Even under those conditions, it took the authors two years and cost the *Times* considerable expense to compile the database from which these figures are drawn. Hopefully, this project will continue and more years will become available for study. For the time being, I grant any misgivings while standing firmly beside my conclusions.
- 3) There are several reasons why candidate questionnaires may not be the best source of information about the allocation of campaign funds. First, there is the problem of respondent recollection. Many of the questionnaires are not filled out until many months after the actual campaign, so that relevant documents are not available to refresh some candidates' memories. This may have the effect of clouding those candidates' recollections. Second, some candidates never know the precise allocation of funds to begin with. They rely on campaign managers and other top organizational staff to deal with the specifics of the distribution of money. This lack of knowledge may be one of the factors behind candidates' overestimation of how much money is spent on television. Third, candidates, especially incumbents, have a vested interest in fostering a perception of television as the root cause of excessive

campaign costs. This shifts blame away from themselves and toward the media. It is much easier to point a finger at someone else than to enact self-imposed reforms. Thus, answers to the questionnaire may be biased.

CHAPTER TWO: LITERATURE REVIEW

The literature on campaign spending can be divided into two categories. The first category of studies deals only tangentially with expenditures in actual campaigns. These studies are more concerned with the effects of money as it relates to activities that occur before and after the campaign cycle. Prominent areas of research in this category include works that explore the access and influence that PACs purchase with their campaign contributions (post-election), as well as works that attempt to determine the degree to which incumbents can deter quality challengers by amassing large campaign war chests (pre-election).

The second category of studies focuses directly on the money spent in actual campaigns. These studies serve as the foundation upon which this particular study rests. Prominent areas of research in this category include the differential effects of spending for incumbents and challengers, the relevance of different resource allocation patterns, the importance of the timing of expenditures, the specific ways that spending impacts voters, the differential effects of spending for House and Senate races, and the determination of the best methodology to employ in studying this subject.

THE INFLUENCE OF POLITICAL ACTION COMMITTEES

Since the literature on the influence of PACs is not directly relevant to the topic under consideration in this dissertation, I will only provide a cursory review. The main finding from these studies is that special-interest groups do not control politicians. Campaign contributions, which are closely related to expenditures, do not necessarily cause politicians to become "puppets on a string" controlled by those who wield vast amounts of money. Even assuming that PACs are driven by the nefarious motive of wielding absolute influence over a congressman, the academic literature provides no clear evidence that those motives ever come to fruition. Usually, campaign

contributions gain interest groups access to politicians that they might not otherwise have. At most, they may persuade a congressman to look favorably upon legislation as it winds its way through the labyrinth of Congress. There is absolutely no reliable evidence to support the contention that PACs are able to buy votes directly through contributions (Hall, 1989; Hall and Wayman, 1990; Krasno, Green, and Cowden, 1994; Mayhew, 1974; Welch, 1982).

THE ROLE OF CAMPAIGN WAR CHESTS

The last decade has seen the emergence of a category of literature that focuses on the role that war chests play in campaigns. The main assumption behind these studies is that high-quality challengers are disinclined to enter races involving well-financed incumbents. In the face of an overwhelming spending disadvantage, smart challengers bide their time and wait for more opportune circumstances in which to run. In this way, the ability of a candidate to raise large sums of money can have a substantial impact on an election. Since a main component of this dissertation involves the quality-level of challengers, the conclusions reached about war chests are of some importance.

The fundraising ability is in and of itself a weapon that can dissuade other candidates from entering a race, or can nullify an emerging threat once a campaign is in full swing. This latter scenario is studied by Krasno, Green, and Cowden (1994). They recognize that a campaign is a dynamic event, and that the usual total expenditures variable cannot fully capture the process. Even if a researcher does break down expenditures according to the time in the campaign that they occurred, this might present an erroneous picture. Expenditures at one point in the campaign might cover things that occur at another point in the campaign; for example, pre-paying for commercials to air at a later date.

Krasno et al. (1994) argue that fundraising receipts are a more reliable instrument for determining the ebb and flow of a campaign. They break down these receipts according to the eight periods reported by the Federal Election Commission (FEC). As expected, incumbents raise more money than challengers over the entire campaign period, though the gap narrows in the final period; there is a 20 to 1 advantage in the first period and a 1.9 to 1 advantage in the eighth period. The amount of funds collected rose steadily over the length of the campaign for both candidates, but the incumbent always had the advantage.

For challengers, the amount of receipts collected in one period affects the amount they collect in the following period. They must raise a lot of money early and then spend that money effectively in order to garner support and additional money in the future. In a sense, success breeds success. Incumbents are not so dependent on past fundraising levels to fuel future efforts, and can turn it on late in the campaign. This ties into the rest of the literature that assumes that incumbents can adjust their fundraising and spending levels in accordance with the perceived electoral threat; a characteristic not shared by challengers.

Box-Steffensmeier (1996) also looks at the different stages of a campaign, but she is concerned with the idea that a war chest can deter challenger entrance into a race. She defines a war chest as the actual amount of cash on hand, since looking at receipts and expenditures creates the problem of untangling reactive and preemptive strategies. Cash on hand is defined by the FEC to include petty cash, funds held in checking and savings accounts, traveler's checks, certificates of deposit, treasury bills, and other investments valued at cost (Federal Election Commission, 1988). She utilizes the relatively new method of duration analysis (Yamaguchi, 1991; Bartels and Brady, 1993) to detect distinct patterns over time.

She finds that, at any point in time, war chests for incumbents who faced a challenger did not differ significantly from those of incumbents who did not; measuring a war chest in January 1999 will not predict whether an incumbent faces a challenger in November 2000. She contends that *when* a challenger enters a race is as important as *if* a challenger enters a race, and her dependent variable reflects this emphasis on the dynamic aspects of a campaign. Her results show that both the size of the war chest and the incumbent's margin of victory in the previous election are significant determinants of challenger entry.

The effect of a larger war chest on challenger entry, however, is nonlinear. Box-Steffensmeier writes, "...if the increase is \$100,000, the hazard rate [of a quality challenger's entry] decreases 26%; if the increase is \$200,000, the hazard rate decreases by 45%. So this \$100,000 differential increase results in a decrease of 19%. In contrast, a \$100,000 differential increase between \$900,000 and \$1,000,000 results in a decrease of only 1.8%. Thus, there are diminishing returns" (1996: 365-66).

THE EFFECTS OF MONEY DURING CAMPAIGNS

This literature is more voluminous. With the introduction of election laws that required campaign organizations to keep and submit detailed records of receipts and expenditures, researchers were able to utilize a vast reservoir of data in an effort to understand the meaning behind and repercussions of the increased spending in congressional campaigns. The emergence of reliable data sources coupled with the newfound interest in candidate spending naturally led to an explosion in this research agenda.

I focus here on that research deemed most important to the development of knowledge in this area. I do this not only in the interest of brevity, but also because limiting review to certain key works will help to establish a clear link between the studies of the past and this current study. As mentioned earlier, these studies provide

the motivation for my current research. The conclusions drawn by other scholars provide illumination in some instances and provide targets for constructive criticism in other instances. Hopefully, any understanding of my study will only be heightened by placing it in a proper context.

An Initial Exploration of Campaign Spending

The article that remains one of the seminal works in this area was written by Gary Jacobson in 1978. Up until that time, the literature on campaign spending was sparse, and the general assumption was that spending had the same consequences for incumbents and challengers. Jacobson challenges that assumption by showing that, in fact, challenger spending yields higher marginal benefits than incumbent spending. The explanation for this counter-intuitive finding lies in the behavior of incumbents.

Incumbency yields many inherent advantages, such as franking privileges and access to government agencies capable of aiding constituents. These advantages lead to very high reelection rates among incumbents, and they often win without facing any strong opposition. So normally, incumbents are not forced to spend large amounts of money in order to win elections. Challengers, on the other hand, have none of these advantages and must rely almost solely on campaign spending to be competitive in an election. The more challengers can spend, the better their chances of winning. Incumbents recognize this and adjust their level of fundraising and spending according to the perceived electoral threat of the challenger. If they face a strong challenger in a close election, they will dramatically increase their spending.

Spending is important to the extent that it provides a candidate with the opportunity to communicate with voters through television, radio, town meetings, pamphlets, etc. Spending increases voter awareness of the candidate. Since incumbents are already fairly well-known and challengers are usually obscure (Mann and Wolfinger, 1990), challengers will have more to gain from spending; they get a

bigger bang for their buck. Even when incumbents increase expenditures to meet the threat, they cannot counter-balance the gains made by challengers. This leads to the finding that the more incumbents spend, the worse they do. In terms of the regression model, the effect of incumbent expenditures is often statistically insignificant and sometimes even negatively related to the incumbent vote share.

Jacobson finds that the two most important variables for explaining incumbent vote shares are challenger spending and the strength of the challenger's party in the district. He finds that for every \$10,000 that challengers spend, they gain approximately 1% of the vote. One of the flaws with his analysis is that he models the relationship between challenger spending and challenger share of the total vote as being linear, when it clearly is not. Candidates cannot gain more than 100% of the vote, so at some point they will begin to experience diminished marginal returns on each dollar spent, especially at the high end of the scale. Jacobson writes that a semilog modeling of this relationship underestimates the challenger vote at higher spending levels, leading to incorrect predictions of defeat. His decision to treat the relationship as linear, though, is probably not the correct solution.

The Endogeneity Problem

One of the main issues addressed by Jacobson, and an issue that plays a prominent role in most of the future research on the topic, is the endogeneity problem. The most important aspect of the endogeneity problem is that the independent variable is highly correlated with the error term. This often occurs in equations where two or more variables have a reciprocal effect on one another, and when a model is not fully specified (Kennedy, 1992). The basic campaign spending model matches this description. The two main independent variables are linked in a reciprocal relationship. Incumbent spending is directly influenced by challenger spending. This relationship

creates the problem of multicollinearity within the model, which often affects significance tests.

Also, the relationship between independent and dependent variables is reciprocal in nature. The hypothesized relationship is that spending affects the vote, but the vote can also influence the level of spending. For instance, assume that an incumbent becomes aware of something that causes him or her to think that the vote will be close. He or she will begin to spend more money in order to counter-act this perceived threat. We are unaware of whatever it is that the incumbent is relying upon, since it is not explicitly included in our model, but it is captured by the error term. As this unobserved phenomenon increases in importance and as incumbent spending increases along with it, the incumbent expenditure variable and the previously random error term become highly correlated.¹ The usual result is the underestimation of the effects of incumbent spending and the overestimation of the effects of challenger spending. Jacobson's solution to this problem is to use two-stage least squares (2SLS) in order to purge the endogeneity from the spending variables.

Second-Generation Studies

Green and Krasno (1988) disagree with Jacobson's methodological decisions and seek to build on his work in their study. They challenge Jacobson's findings on three fronts. First, they posit that not all challengers will necessarily derive the same benefits from campaign spending. There is a vast difference between those who have never held elective office and are inexperienced in organizing a campaign, and those who have waged successful campaigns in the past. In order to capture this they construct a challenger political quality (CPQ) variable that is based on the attractiveness and skill of the candidate.

The second area of departure from the previous study involves the issue of spending linearity discussed above. They recognize that the gains enjoyed by

challengers through increased expenditures must taper off at some point, and they use logarithmic functions in order to capture these diminishing returns. Finally, they assert that the problem of spending being correlated with the error term can be corrected by creating an instrumental variable, rather than relying on the actual expenditures as a direct measure. This instrumental variable is the amount of money spent by the incumbent in the prior election. They argue that the other independent variables capture the reactive nature of incumbent expenditures, which allows this variable to pinpoint an incumbent's propensity to spend, regardless of his or her vulnerability in the current election.

The results of their study show that CPQ has a direct effect on the vote, plus a positive effect when interacted with challenger expenditures. This means that high-quality challengers get a larger effect from spending, especially at higher levels; at these high levels, a challenger's personal characteristics become more important than long-term political forces. They find that there are diminishing returns, and that incumbent spending does have a direct effect on the vote total, though it is not as strong as challenger spending. Incumbent spending can even counter-balance most of the effects of challenger spending if the challenger spends a small amount. For instance, if a challenger spends less than \$10,000, then an incumbent can reduce the share of the challenger's vote by 5.3% for every \$100,000 that he or she spends.

In a rebuttal article, Jacobson (1990) refutes the findings by Green and Krasno. He claims that their instrumental variable is highly correlated with several other independent variables, which skews the results. He correctly points out that Green and Krasno only assume a nonlinear relationship for challenger spending and the vote, while continuing to treat the effect of incumbent spending as linear. There is no sound theoretical reason for drawing this distinction, and doing so could artificially inflate the importance of incumbent spending. In order to correct for this mistake, he conducts

natural log transformations on both variables (making \$5,000 the lowest amount that a candidate could spend) and reaches the same substantive conclusions that he reached in his original article. Challenger expenditures have twice the effect of incumbent expenditures at all levels of spending.

He adds a new twist to the research by utilizing an ABC/Washington Post panel survey to decipher exactly how spending affects voters. He shows that increased challenger spending will increase the likelihood that a voter who was originally opposed to the challenger will become supportive of him or her, particularly if the voter is of the same party. Likewise, challenger spending prevents supporters from defecting to the incumbent's camp, particularly among partisan rivals. These results come after holding partisan identification and national political forces constant. Incumbent spending has no effect on changes in vote intention.

Jacobson does note the continued difficulty of trying to untangle the effects of variables on both the vote total and candidate expenditures. Ansolabehere and Gerber (1994) suggest that this task is made more difficult by the misspecification of the key explanatory variables. They contend that using total expenditures as a measure of the challenger and incumbent spending variables is unreliable. A distinction should be made between total expenditures and campaign-related expenditures. As noted earlier, the primary importance of money is to provide candidates with communicative access to the electorate; this is what we mean when we say that spending increases voter awareness. So the spending that goes toward other things—overhead, donations, unitemized expenses—is not necessarily what political scientists should want to study. That kind of spending certainly helps to maintain a campaign, but it does not necessarily translate as directly into votes.

Ansolabehere and Gerber use a 1990 data set that decomposes spending into different categories. They then estimate regression equations using the traditional

measure for expenditures and their more stringent measure. They find that challengers spend \$3 out of every \$5 on direct voter contact, while incumbents spend \$2 out of every \$5. This illustrates how the traditional measure can bias the coefficients for spending toward zero, especially for incumbents. The model using the more stringent criteria also produces much stronger coefficients, though the curious result of incumbent spending actually being negatively correlated still holds.

Abramowitz (1991) does not find that incumbent spending is negatively related to vote shares, but he does find that it has no significant effect on the vote. This is made all the more odd due to the increased incumbency advantage in the mid-1980s and 1990s. Compared to the 1960s and 1970s, incumbents are being reelected at higher rates and with larger margins of victory. He looks at the 1984-86 elections, and includes variables such as seniority, political scandal, and the rate of defection on party votes for incumbents. Many of these contextual variables turn out to be significant explanations for the vote, but challenger expenditure is still the strongest.

On the endogeneity front, he argues that the problem is not so much the reciprocal relationship between spending and the vote, since the actual final vote total cannot affect campaign spending. Thus, instrumental variables need not be constructed. Rather, it is the expectations of the vote by political elites that influence spending. So Abramowitz includes a variable culled from CQ reports on the races as a measure of elite expectations, but finds that the coefficient for this variable is not significant. From this he concludes that the model must already account for these expectations, and is therefore not severely biased.

Part of the problem with this variable is that it relies too heavily on timing. The reports filed by CQ are based on hundreds of interviews with political experts from around the country. Based on these interviews, CQ rates the competitiveness of a race

based on a seven-point scale ranging from "safe Democratic" to "safe Republican." These interviews are conducted between February and September of the election year. Arguably, the resulting reports might be flawed because interviews took place *before* crucial events occurred in the campaigns or well *after* elite actions worked their magic on the campaigns. In other words, elite expectations could affect the flow of campaign contributions and expenditures, but simply not be detected by these reports.

When comparing the results from the model for 1984-86 to results for 1974-76, he discovers that the effect of challenger spending is not as strong as it once was. When you combine this with the fact that challengers are not spending as much money as they once did and with the escalating costs of campaigns, then the reason for the increased incumbency advantage becomes clearer. Incumbents are aided by other factors that more than offset their impotence in terms of campaign spending.

Kenny and McBurnett (1994) dismiss the claim of an incumbent's ineffectiveness in spending and agree with the earlier conclusion drawn by Green and Krasno. This innovative study directly tackles the endogeneity problem that hampered Jacobson and others, while also providing fresh insight into which voters are most affected by campaign spending. Its main distinction lies in the fact that it takes an individual-level approach to the issue, rather than the common aggregate approach. They derive the individual-level data from the 1984 ANES data set. Recognizing that "money and electoral outcomes are closely intertwined" (1994: 700), they construct a multiple equation model to account for this.

Compared to the single equation model, the results conform to our common sense expectations. Both incumbent expenditures and challenger expenditures affect the vote, though the latter is the stronger of the two. Therefore, incumbents do derive direct, positive benefits from increased spending, even if these benefits are not as large

as those reaped by challengers. The authors also find that the voters most likely to be influenced by campaign communications are those that have weak partisan attachments, low educational levels, and little interest in the campaign.

Goidel and Gross (1994) also use a system of equations in modeling spending effects, and come up with conclusions that are similar to those of Kenny and McBurnett. Though they are operating at the aggregate level, they share Kenny and McBurnett's view that a system of equations is necessary in order to account for the endogenous nature of the expenditure variables; this, in turn, helps vanquish the endogeneity problem. Goidel and Gross (1994: 135-36) note,

Unlike two-stage least squares, which proceeds on an equation-by-equation basis, three-stage least squares estimates the entire system simultaneously. Moreover, three-stage least squares incorporates the correlation between the residual terms of the individual regression equations into the estimation process. Consequently, estimation with three-stage least squares is asymptotically more efficient than estimation with two-stage least squares (Greene, 1990). The greater the correlation between these error terms, the greater the gain in efficiency over two-stage estimation. Given the subject matter at hand, one might suspect that the error terms of the separate regression equations would be highly correlated. Consequently, the gain in efficiency may be substantial.

Like Green and Krasno, they include a CPQ variable in their model. Their conclusions are similar to those of Kenny and McBurnett, in that they find that incumbent spending does have a direct, positive impact on the total vote, though not as much of an impact as challenger spending. They provide an additional bit of information by showing that the benefits of incumbent spending are also differential. "First-term incumbents receive a much larger marginal return on their expenditures than do multi-term incumbents. In fact, the marginal return on spending by first-term incumbents rivals the marginal return on spending by challengers" (Goidel and Gross, 1994: 125).

This makes sense when one considers that freshly minted incumbents have not had time to do the things--casework and bringing home the pork--that help to establish a personal constituency. Established members, however, have done the things necessary to become entrenched in a district, so that spending is less beneficial to them. This is consistent with my main theoretical argument, since established members should have higher visibility among constituents than their first-term counterparts.

For CPQ, they find that quality challengers are successful at fundraising; for every additional point on their quality scale, a challenger gains over \$60,000 in additional expenditures. The greater ease with which quality challengers can raise funds combined with the greater benefits that quality challengers receive at higher levels of spending (the Green and Krasno finding discussed above) provide ample evidence of why incumbents have reason to fear challenges from high-quality candidates.

A Dissenting View

The most recent article to explore this subject reaches conclusions that sharply differ from previous findings. Gerber's (1998) study also distinguishes itself by being one of the few to take a look at the effects of spending in Senate races, instead of the usual focus on House races. Rather than use a system of equations approach to tackle the endogeneity problem, he opts for the methodology used earlier by Green and Krasno. Gerber suggests that a 2SLS model is sufficient, as long as one corrects for the blunder that plagued the earlier study; namely, one must treat *both* incumbent and challenger spending as endogenous variables. Beyond this, he claims that the major innovation of his study is the use of a new set of instrumental variables that permits more consistent model estimation.

These instrumental variables should influence campaign spending without directly affecting the election itself; Gerber selects challenger wealth level, state voting

age population, and lagged spending. The lagged spending variable is an extension of the lone instrumental variable employed by Green and Krasno. Since House races are every two years, Green and Krasno look at the amount spent by actual incumbents in their last races. The staggered nature of Senate races causes Gerber to look at the amount spent in the last race, whether or not it involves the same incumbent. He notes, "...the previous race and the current race rarely involve the same incumbent or challenger. The variable is therefore free from the criticism that might be applied to lagged spending by the same candidate, namely, that specific candidate attributes are correlated with both the regression error and past fundraising levels" (Gerber, 1998: 405).

When estimating a standard OLS regression model, Gerber generates the same results as other studies; both incumbent and challenger spending is important, but challenger spending is almost twice as effective. It is when he estimates the 2SLS model using the instrumental variables that his findings veer dramatically from previous findings. He concludes,

...the traditional view of incumbent campaign spending does not hold up when OLS regressions are reestimated using an instrumental variables approach. In fact, after taking the endogeneity of spending into account, the marginal effects of incumbent and challenger spending are statistically equivalent. [And the overall effect of campaign spending is to boost the share of the incumbent vote by 6.28%]. This result is very robust to changes in the set of instruments. The assumptions underlying the 2SLS estimation hold up very well; standard statistical tests confirm the endogeneity of candidate spending levels and the exogeneity of the instruments (Gerber, 1998: 409).

CONCLUSION

With this review of the literature, we are now in a position to revisit the question posed earlier. Does campaign spending have an impact on electoral outcomes? The answer is mixed. The conventional wisdom that says special interest groups control

politicians is not supported; the conventional wisdom that says money is important to campaigns is supported; and the jury is still out concerning the conventional wisdom that says incumbents can buy elections because of their spending advantage.

Large contributions are not enough to lure candidates into the pockets of fat-cat contributors. Contributions can, however, help incumbents dissuade potential quality challengers through the accumulation of large war chests. And when challengers do enter the race, there is overwhelming evidence to support the claim that actual expenditures do have an effect on the vote. There are virtually no political scientists working in this area who claim that spending in campaigns is irrelevant. The only real points of contention remaining are whether these positive effects are shared equally by both candidates and how these effects come about in the first place.

In this study, I concentrate on the impact that candidate expenditures have on congressional elections, though I also seek to expand the literature by including elements from studies on candidate quality and voter information. It will also be one of the first to take a comparative approach by examining the effects of campaign spending for both the House of Representatives and the Senate. Let us now take a more detailed look at the core theoretical arguments underpinning this dissertation, as well as the research design that is meant to fortify these theoretical positions.

END NOTES

- 1) Since receipts and expenditures are opposite sides of the same coin, a similar logic applies to the behavior of contributors. If contributors expect that the election will be close, then they are more apt to give more money to the candidates, who will in turn have higher expenditures.

CHAPTER THREE: THE THEORY

The recent work of Alan Gerber (1998) serves as the catalyst for this dissertation. As mentioned in the previous chapter, this work is interesting for three reasons. First, whereas the vast majority of studies on campaign spending focus on the House, Gerber examines the effects of spending in Senate elections. Second, Gerber finds a way to reliably use the tried-and-true technique of 2SLS by creating three instrumental variables, so that both incumbent and challenger spending can be treated as endogenous. Third, his conclusion that incumbent and challenger spending effects are roughly equal challenges the view held by most scholars.

This dissertation is a replication and extension of Gerber's work. It is a replication in that I try to mirror his operationalization and generate similar results for Senate elections.¹ However, I offer an alternative explanation that is at odds with his main theoretical explanation for why Senate incumbents and challengers receive equal marginal benefits from their respective expenditures. It is an extension of that article in that I apply roughly the same operationalization and methodology to House elections. The theoretical lens used for viewing Senate races offers an equally focused picture of races in the House.

A DIFFERENCE OF OPINION

Now I would like to turn to a discussion of the differences of opinion that I have with Gerber concerning the theoretical explanations for his findings. For any social science research to gain relevance, there must be a sound theoretical underpinning to the data and methodological machinations. Without a reasonable and enlightening theory, research findings are nothing more than a series of disjointed potentialities. And when a new study comes along that presents findings that are at odds with the usual fare of a research agenda, it behooves the author to offer an alternative

explanation for why these findings should be accepted. In this instance, it is Gerber who must offer a reasonable explanation to accompany his conclusions. Alas, such an explanation is not forthcoming.

The Information Explanation

As noted earlier, most research in the area of campaign spending finds that challengers receive greater benefits from expenditures than incumbents. The traditional explanation for this, originally given by Jacobson, is that spending is mainly used on communication which increases candidate visibility among the electorate. Since incumbents are better known than challengers, they naturally have less to gain by spending on communication. It is not as if spending is of no use to them, but simply that they will not achieve the dramatic increase in voter recognition that well-funded challengers achieve.

Gerber's finding that Senate challengers and incumbents receive the same benefits from spending not only challenges the usual empirical findings, but also has theoretical implications. Gerber asserts that the old explanation no longer holds—even in the case of House elections. He writes,

The level of voter familiarity with Senate incumbents is similar to that for House incumbents, while Senate challengers are in many cases better known than the typical House challenger but often not as well known as the Senate incumbent (Westlye, 1991). Thus, the informational advantage for incumbents is smaller in Senate elections, but they appear to enjoy a definite edge. This would lead to a prediction that estimates of spending effects in Senate elections might show a smaller relative advantage for challenger spending over incumbent spending than that observed in House elections, but not no advantage at all (Gerber, 1998: 410).

Clearly, he thinks that the rough equality of spending benefits among both types of candidates in the Senate calls the old theory into question. There is a problem with this line of thinking. While Gerber is probably correct in speculating that the smaller

informational advantages for Senate incumbents over their challengers would not result in equal spending coefficients for incumbents and challengers, it is quite possible that the differences in results for Senate and House elections could *at least partly* be attributed to the differences in informational advantages for House and Senate incumbents.

When examining the informational advantages of House and Senate incumbents from 1980 to 1994, one finds that House incumbents have an average recognition advantage of about 40% (i.e. 92% to 52%), while Senate incumbents have a recognition advantage of only 19% (i.e. 97% to 78%) (Jacobson, 1997: 96). It is also telling that Senate challengers are 26% more recognized than House challengers. This places at least some limitations on how much electoral benefit that Senate challengers can obtain with higher levels of spending, and hence may result in at least some equalization of incumbent and challenger spending effects in Senate elections. Overall, it is not implausible that the reduced informational advantage of Senate incumbents over their challengers can account for a substantial amount of equalization of spending effects for Senate incumbents and challengers vis-a-vis the House.

Take an instance where a high-quality challenger decides to enter a Senate race. Let us assume that this challenger has high name recognition within the state. Let us assume that, in fact, the electorate is as familiar with this challenger as they are with the incumbent. In this instance, one would expect to find that both candidates receive essentially equal marginal benefits from their campaign expenditures. Thus, the empirical findings would contradict the traditional findings while still fitting into the traditional theory.

Of course, not every race is going to exhibit this type of equality. But there will be more Senate races approximating this situation than House races. Approximation is a key word. A challenger need not achieve total equality with an incumbent, in terms of

voter familiarity, in order for the data analysis to show roughly equal benefits from campaign spending. The challenger need only be fairly close to the incumbent for these results to surface.

House races typically do not attract the kind of quality challengers that Senate races do. The severe partisan make-up of many districts renders one of the parties basically impotent. Often, this leads to a situation where incumbents face no challengers at all. There have been numerous instances of uncontested races for the House in the past two decades, something that is extremely rare in races for the Senate (Campbell, 1996). On those occasions when the disadvantaged party does field challengers, they often provide little more than token opposition. Needless to say, these challengers do not top the list of most recognized personalities in their communities. And even in competitive districts, challengers often find it hard to get their message across due to a relative lack of coverage by the media (Clarke and Evans, 1983).

These same dynamics are not at work in races for the Senate. Since a Senate seat is more valuable than a seat in the House, one would expect that more highly qualified challengers will be attracted to Senate races. The benefits of the seat help to alleviate the associated costs that sometimes prove to be a deterrent against candidate entry into a race (Black, 1972; Rohde, 1979). In cases where a sitting incumbent is perceived to be vulnerable, strategic considerations cause the most formidable challengers of all to emerge (Jacobson and Kernell, 1981).

A high-quality challenger is likely to be far more familiar to voters than an obscure challenger. Putting these things together, one arrives at a simple conclusion: the average Senate contest will exhibit a smaller gap between incumbents and challengers in terms of candidate quality and voter familiarity than the average House contest. If the spending benefits that accrue to challengers are based on the initial lack of familiarity, then when that lack of familiarity dissipates, so should the relative

spending benefits. Simply stated, my theory is that the difference in voter information about Senate incumbents and challengers is smaller than the difference in voter information about House incumbents and challengers, and that this smaller difference in voter information about the two candidates creates an environment where Senate incumbents and challengers derive fairly equal benefits from their campaign spending. In some cases, the effects may be equal.

I believe that this explanation of Gerber's results is more reasonable than the ones offered by Gerber himself. Though he mounts a vigorous argument for why Jacobson's traditional theory of campaign spending effects should be rejected, he is far more tepid in advancing theories that would serve to replace it. Initially, he said that Senate incumbents know how to spend their money more effectively than House incumbents. This was the argument he forwarded in an earlier draft of his article. Since this explanation is not explicitly presented in the published article, one can only assume that even he may be having second thoughts about its validity. In the voluminous amount of research conducted on the effects of incumbent advantages, nowhere is it stated that senators are more expert than their House colleagues in wielding these advantages (Cover and Brumberg, 1982; Ferejohn, 1977; Fiorina, 1977; Johannes and McAdams, 1981; Mayhew, 1974; Payne, 1980; Stein and Bickers, 1994).

The Incumbent Efficiency Explanation

He does not seem willing to abandon this thread of logic entirely, but rather shifts ground to an explanation that has more "at first glance" appeal. Instead of comparing the spending efficiency of Senate incumbents to House incumbents, Gerber settles on a comparison of incumbents to challengers. He writes,

In theory, incumbent spending may be *more* effective than challenger spending. Incumbents typically have advantages in organization and expertise that make

their expenditures more efficient and therefore more effective dollar for dollar than those of challengers. If this is an important consideration, then the marginal effect of spending by the incumbent may be *greater* than the marginal effect of challenger spending (Gerber, 1998: 402).

Upon closer inspection, this explanation also reveals a couple of flaws. First, Gerber's own results do not allow him to proffer this claim. His central finding is that Senate incumbent and challenger spending is roughly equal, but in order for the above explanation to hold, they would have to be unequal. Senate incumbents should receive higher marginal returns on their expenditures than challengers if they have greater organizational expertise and efficiency. He is falling into the same trap that he accuses those proponents of the traditional theory of having fallen into. His earlier quote states that the rough equality of expenditure coefficients in the face of unequal informational advantages is illogical, but by the same token, equal coefficients in the face of unequal organizational advantages are also illogical.

Second, even if Gerber's results supported the contention that Senate incumbents have organizational advantages over their challengers, this contention still does not account for the consistent results achieved by scholars studying House elections. The fact remains that House incumbents derive *fewer* benefits from campaign expenditures than House challengers. Surely, House incumbents have organizational and expertise advantages similar to those of their colleagues in the Senate. If so, why is it that spending coefficients for incumbents and challengers in Senate elections are roughly equal, while spending coefficients for challengers in House elections are greater than those for incumbents?

Although this alternative theory comes up short, the traditional theory forwarded by Jacobson and supported in this dissertation hits the mark. Again, the different pattern of spending effects between the two sets of candidates is the result of dissimilarities between the challengers. Mainly due to the prestige of the office, Senate

contests attract challengers who have credentials that are superior to those of House challengers. Among those credentials is a higher level of public recognition. This higher visibility brings Senate challengers into closer proximity to Senate incumbents; thus, both receive a similar bang for the buck. The relative lack of visibility among House challengers gives them more room to operate and, consequently, a greater return on their expenditures.

The Negative Advertising Theory

Another explanation that serves as an alternative to Jacobson's focuses on the various ways that campaign funds can be employed. Gerber writes, "...campaigning not only informs the voters about oneself but also brings to light damning information about one's opponent. When the voters do not know much about the challenger, this gives the incumbent a great opportunity to use money to 'define' the challenger" (1998: 402). This explanation is also logically flawed. Contrary to Gerber's assertion, incumbents usually do not bring damning information to light about their challengers until their challengers become serious, viable candidates. There is little reason to expect electorally secure incumbents with large campaign chests to spend money destroying their opponents if there is little chance that those opponents will win (Ansolabehere, Iyengar, Simon, and Valentino, 1994).

The old political axiom that any press is good press certainly applies to obscure challengers. If an incumbent is facing a little-known challenger and is virtually assured reelection, what possible rationale would lead that incumbent to risk waking a sleeping lion by dramatically increasing the visibility of that challenger, even if it occurs through the release of negative information. For if the voters ultimately disregard the negative attacks, then the incumbent is faced with a visible candidate who has been at least partially inoculated against future negative attacks. The separation of Bill Clinton from

the pack of other Democratic hopefuls in early 1992, due in large measure to the Gennifer Flowers story, is a case in point.

The Incumbent Behavior Explanation

Gerber's final attempt at a reasoned explanation for his results is the weakest of all. He appears to wash his hands of theorizing altogether and merely exclaims that since politicians believe incumbent spending has an effect, then it must be true. He writes, "A final reason for skepticism [toward Jacobson's theory] is that the actual behavior of incumbents, who are political professionals, appears to contradict the premise that incumbent campaign spending has little effect. If incumbents are sensible, then it is hard to explain their substantial fundraising efforts" (Gerber, 1998: 402).

Obviously, this assertion, too, is riddled with problems. First, one must recognize the distinction between fundraising in order to amass a substantial war chest and actually spending those funds during a campaign. It makes perfect sense for incumbents to raise large sums of money, because doing so helps to ensure that they will not face quality challengers (Box-Steffensmeier, 1996). Incumbents may be raising this money with the expectation that they will need to spend only a fraction of it during the actual campaign.

Second, even if incumbents are convinced that they receive vast benefits from campaign spending, they may be mistaken. Political scientists simply cannot accept the perceptions of politicians as fact. Rather, we should examine the underlying factual basis for any claims made by others—"professionals" or not. If we relied solely on the beliefs of politicians, then we would accept their absolute conviction that they must mirror the views of their constituency when voting on bills or risk severe electoral consequences in the next election. In truth, numerous studies have found a dearth of knowledge among the electorate when it comes to the issue positions taken by

congressmen. Most voters are doing well if they can recount even one of the detailed policy stances of their congressmen, much less punish them for straying on a particular roll-call vote (Hinckley, 1976; Miller and Stokes, 1963; Smith, 1989; Wright, 1989).

CONCLUSION

It now becomes clear that Gerber's study contains interesting findings in need of an equally interesting theory. His empirical results, if valid, offer a sharp contrast to virtually all of the other studies in the field of campaign spending. But he offers no compelling reason for why these results should cast Jacobson's general theory in doubt. The results of his study may negate the specific hypothesis that incumbent spending is relatively unimportant in Senate elections, while confirming the general theory which states that the level of candidate recognition among the electorate determines the effectiveness of campaign expenditures.

It is my goal in this dissertation to bridge the gap between theory and data. By analyzing both House and Senate elections, I can explore how different electoral environments affect campaign spending. Also, I can compare the relevance of factors such as challenger political quality, candidate visibility, and campaign-specific events. I can do all of this within the context of an overarching theory that serves to guide my exploration of these matters.

END NOTES

- 1) His study goes through the year 1992. Since my study goes through the year 1994, this will not be an exact replication. However, the addition of one election cycle should not dramatically alter the basic results.

CHAPTER FOUR: DATA AND METHODS

The following pages provide detailed information on the data and methods used for this study. The study encompasses all House and Senate elections occurring from 1974 to 1994.¹ This creates a data set containing approximately five thousand cases. These cases are used in a model that contains variables proven to be related to the vote in previous research. Besides the main explanatory variables of interest--candidate expenditures and challenger political quality--the model encompasses economic factors, partisan and ideological influences, and situations that prove to be isolated quirks affecting specific elections. It also contains a set of instrumental variables. The dependent variable in the equation is the incumbent's percentage of the two-party vote.

INCUMBENT AND CHALLENGER SPENDING

Since candidate spending lies at the heart of any study focusing on campaign finance, it is imperative that this variable be measured and modeled correctly. Much of the debate over the true effects of spending centers on the elusiveness of this variable. Over twenty years of research by top scholars has not produced an accepted approach for constructing the spending variable or exploring the relationship between candidate spending and the vote. This is problematic when one considers that alternative methods of measurement and modeling produce drastically different results.

An initial point of contention centers on the type of regression equation that should be used to estimate the effects of spending. The traditional method used for regressing a dependent variable on a set of independent variables is ordinary least squares (OLS). However, due to the nonrecursive nature of the relationship between spending and votes (see my discussion of the endogeneity problem in Chapter 2), OLS is not the optimal method for modeling this relationship. There have been studies that

employ OLS (Jacobson, 1978 & 1985; Abramowitz, 1988), but newer research calls the results of those studies into question (Gerber, 1998; Green and Krasno, 1988; Kenny and McBurnett, 1994).

Since the spending variables in the model are endogenous and OLS produces biased estimates, a different statistical technique is required. In general, there are two paths that one can take. Some scholars prefer using a system of equations to estimate the effects of spending (Goidel and Gross, 1994). As Kenny and McBurnett write,

... the single-equation model produces insignificant incumbent expenditure effects because it suffers from the same simultaneity problems of many aggregate models. Estimating a system of equations accounts for the endogeneity of expenditures and should produce the intuitively sensible result that spending improves electoral prospects for incumbents as well as challengers, although probably not to the same degree (1994: 701).

Other scholars rely on two-stage least squares (2SLS) as their estimation technique (Gerber, 1998; Green and Krasno, 1988). 2SLS purges a model of any "white noise" caused by the covariance of independent variables with the error term. The procedure involves estimating a predicted value (reduced form) for the endogenous regressors. These predicted values are then used in the second-stage regression as replacements for the original independent variables. The key to any of these multi-equation models is finding instrumental variables onto which the endogenous variables can be regressed. The paramount requirement for an instrumental variable is that it affect the endogenous explanatory variable without directly affecting the dependent variable.

In the case of campaign spending, an instrumental variable should influence candidate expenditures without influencing the vote. Jacobson (1990) notes the peril in trying to discover such a variable:

Any observable variable known to influence the vote should also affect campaign contributions, and it is difficult to come up with any observable variable that would systematically affect contributions (especially to challengers) without also independently affecting the vote. Certainly conditions known to influence contributions would affect the expected vote, which would in turn affect contributions, and so on. If all of the available exogenous variables influence both spending and votes, reciprocal effects can never be untangled using these techniques (341-42).

Gerber (1998) claims that his most important contribution to the literature is putting forth instrumental variables that stand up to that paramount requirement, and, in so doing, provide us with the most accurate and dependable means for gleaning the true effects of candidate spending on the vote. This dissertation follows Gerber's lead by employing these variables (see Instrumental Variables section) and estimating their effects in a 2SLS model.

Another point of contention concerns what form the relationship between spending and votes should take: linear or logarithmic. In his seminal article, Jacobson (1978) finds that both forms support his central conclusion of greater challenger spending effects, but that other differences are apparent. He writes,

The functional relationship between spending and votes is assumed to be linear. This has the advantage of simplicity but the drawback that it fails to allow for the diminishing returns that must apply to campaign spending; no candidate can get more than 100 percent of the vote, no matter how much is spent. An attractive alternative is the semilog form in which spending is entered as the natural logarithm of actual expenditures (Welch, 1976); it permits diminishing returns but does not allow them to become negative as would, for instance, a quadratic model (Silberman and Yochum, 1977).

But the semilog model has the defect of seriously underestimating the challenger's vote at higher levels of spending; that is, it provides estimates which exaggerate the extent to which returns diminish as spending increases....The linear equation exaggerates the expected vote of challengers at higher levels of spending, but inspection of the residuals [the difference between the actual vote and the predicted vote] indicates that this is not a significant problem until the challenger's spending exceeds \$160,000, which occurs in less than 2 percent of the cases in either election year; at this level of spending the

equations are less likely to overpredict the number of winning challengers than they are to overstate the size of the challenger's victory (Jacobson, 1978: 471).

A simple additive relationship between expenditures and votes is, ultimately, untenable. Virtually everyone agrees that there are definite diminishing returns at higher levels of spending, and since challengers tend to spend less than incumbents, simple linear models will overestimate challenger spending and underestimate incumbent spending. Even Jacobson (1990), in more recent research, abandons the use of linear functions for spending. The question becomes how to properly account for this diminution.

Abramowitz (1991) confronts this dilemma by including a variable that is the square of a candidate's spending. This "spending-squared" variable is significant in the model, but does not provide for the type of nuance that one would hope for when constructing a spending model. It is the equivalent of a sledgehammer when a scalpel is preferable. For instance, this type of operationalization can tell us how diminished the returns are when a candidate goes from \$200,000 to \$400,000, but provides us with no information about the rate of descent between these two figures.

Perhaps the best technique for capturing diminishing returns at all levels of spending is to calculate the logarithm of expenditures (Gerber, 1998; Jacobson, 1990). This functional form conforms to the sensible expectation that spending has positive benefits at all levels, but that the marginal returns decrease at higher levels. This decreased marginal utility is to be expected for two reasons.

First, the most basic and critical campaign tasks (e.g. opening campaign offices, acquiring equipment, hiring staff) are taken care of with early expenditures, so that later expenditures should not have as dramatic an effect. Second, the main value of campaign funds is that they increase candidate visibility. If candidates are spending

high levels of money, then they have probably already achieved a significant degree of visibility; any further spending is rendered less valuable.

In this study, the two expenditure variables represent total campaign spending and are measured in real 1974 dollars.² Because the log of zero is undefined, every candidate is given a minimum expenditure of \$5,000 before transforming the data to a logarithmic function (Jacobson, 1990: 338). This minimum dollar amount also prevents the log transformation from sending the value of very low expenditures to negative infinity.

INSTRUMENTAL VARIABLES

The first instrumental variable is based on a measure of challenger wealth. Obviously, wealthy challengers have more money to spend on their campaigns than those without such resources. This variable is created by reading through the summaries of House and Senate races presented in the bi-annual election preview issue of the *Congressional Quarterly*. The variable is coded 0 (not wealthy) if the challenger's occupation is listed as a lawyer, teacher, airline pilot, businessperson, or as someone who works in the public sector or military. It is coded 1 (wealthy) if the challenger is described as a business owner, president or top executive of a corporation, banker, real estate developer, doctor, law firm partner, or as someone who is "wealthy," "a millionaire," or "an heir."

The second instrumental variable is based on the size of a state's population. This variable has been the focus of an ongoing debate among some in the academic community. Remember, state population size can only be used as an instrumental variable if it does not affect the vote; some scholars assert that it does just that. By examining Senate elections from 1946 to 1980, Hibbing and Brandes (1983) find that each additional congressional district in a state costs incumbents .17 percent of the

two-party vote. This would translate into a senator from California receiving around nine percentage points less than a senator from Montana.

There are two reasonable explanations for this finding. First, senators from large states are unable to have the amount of personal contact with their constituents that senators from small states enjoy. This kind of personal interaction is a superb way to cultivate a positive image among the electorate. Since senators representing large populations have greater difficulty meeting with a significant number of their constituents, their position among these possible voters is less secure (Hibbing and Brandes, 1983).

A similar logic applies to the handling of casework. Senators are often judged on their ability to effectively handle casework and other types of district service. Each senator has a finite amount of time and resources to devote to these tasks. As the population grows, the proportion of that population that a senator can attend to shrinks. Because constituency service often translates into votes, senators understandably want to solve as large a proportion of voters' problems as possible (Cain, Ferejohn, and Fiorina, 1984; Johannes, 1984; McAdams and Johannes, 1988; Parker, 1980; Serra, 1994; Yianakis, 1981). Senators from large states are often unable to "pay assiduous attention to the needs of [their] constituents" (Jewell and Patterson, 1977: 91).

The second explanation has received scant attention within this literature. This explanation centers on the increased political, economic, and cultural diversity that usually accompanies population growth. Senators from small states, as well as representatives, have an easier time satisfying the interests of their constituents because those constituents tend to be more homogenous. Simple solutions become harder to come by when there is a multitude of competing interests vying for a piece of the proverbial pie. An exploration of state heterogeneity, as opposed to sheer population size, as a cause of decreased incumbent vote share is a possible area for future research.

A pair of more recent studies have cast serious doubt on the assertion that "Senators from heavily populated states do substantially worse on election day than Senators from lightly populated states" (Hibbing and Brandes, 1983: 811). Westlye (1991) examines Senate elections from 1968 to 1984. He uses three separate criteria to judge the electoral success of senators: average margin of victory, number of elections won by more than 20 percentage points, and number of elections where the incumbent lost reelection. For all three categories, he finds that there is a weak relationship between population size and the vote, and that this relationship is primarily due to very large states. He writes,

There appears to be no significant difference in the margin of victory of Senate elections whether a senator represents 550,000 constituents or 5.5 million. It is only in the very largest states--where constituents number more than 10 million--that a senator's average margin of victory is significantly lower than in smaller states. It is only in these few very heavily populated states, as well, that notably fewer elections are of the "safe" variety and that the chances of winning reelection are significantly reduced....the threshold above which "assiduous attention to constituents' needs" fails to pay off would appear to be so high that only senators in the largest states are affected. For most states, and therefore for most Senate elections, state size is not a sufficient explanation for electoral results (Westlye, 1991: 157).

Krasno (1994) divides Senate elections into three different periods: 1946 to 1960, 1962 to 1978, and 1980 to 1992. He finds that Senate seats located in small states have become safer during the last two periods, with 40 percent of incumbents losing reelection bids in the first period compared to 11 percent and 8 percent in the latter two. He also finds that seats located in the three largest states--California, Texas, and New York--have become safer during the latest period. Since 1980, only two incumbent senators have lost races in these states: appointee John Seymour (R-CA) and scandal-ridden Al D'Amato (R-NY).

Overall, Krasno reaches conclusions that are very similar to Westlye's. Remove the largest states from the equation and virtually no relationship between the two variables remains. He writes,

Restricting the analysis to states with fewer than twenty-six House districts... substantially reduces the effect of state population (to .05 percentage points). If representing more people does cost senators votes, this phenomenon is felt almost entirely in a handful of the most populous states. In addition, state size alone is a poor predictor of the vote. The number of congressional districts in a state accounts for very little of the variation in incumbent senators' share of the vote ($R\text{-squared}=.010$) (Krasno, 1994: 45).

So, the size of a state's population does not appear to influence the vote. It should, however, influence campaign expenditures. Since senators can raise money independent of their states' population, those from small states should raise and spend more funds per capita than those from large states (Magleby, 1989). Individual contributors do not necessarily tie their contribution levels to the size of the state that a candidate is from, and research shows that PAC contributions do not increase with the population size of a senator's state (Snyder 1989, 1990).³ A final reason to suspect that per capita spending varies inversely with population size is that the legal limits on contributions set by the FEC are fixed sums, instead of being scaled to a state's population.

The state population variable is coded as the number of residents in each state as determined by the census. Census data are also used in determining the population size for each House district. Obviously, House districts do not display the degree of variation in population that is seen among the states.⁴ However, there is enough variance, especially in terms of a longitudinal perspective, to offer a suitable analysis.

CHALLENGER POLITICAL QUALITY

In addition to candidate expenditures, the other key independent variable is challenger political quality (CPQ). As mentioned earlier, CPQ is important because it

serves as a proxy for candidate visibility in my aggregate model. The assumption is that challengers with a greater degree of prominence are more recognizable to the general public than challengers who exist in relative obscurity. This prominence can be derived from holding high office or from distinguished personal characteristics. As with candidate spending, the importance of CPQ to the model makes it crucial that an appropriate measurement is utilized.

The scholarly literature is rife with various ways to measure challenger political quality. Jacobson (1978) and Jacobson and Kernell (1983) introduce the concept of CPQ. They assert that challengers who had previously held elective office were more successful in congressional elections than those that had no previous experience. To capture this difference, they use a simple dummy variable, coded 1 for candidates who previously held elective office. While many scholars have adopted this measure, others have sought more nuanced measures of CPQ.

Bond, Covington, and Fleisher (1985) develop a three-point quality scale based upon previous experience. They also create a composite of this scale and challenger spending. In a study of Senate elections, Squire (1989) also relies on more than just previous experience in creating a measure. He interacts a seven-point quality scale with the percentage of a state's population represented by the officeholder, which results in a staggering 600-point scale. Krasno and Green (1988) provide the most comprehensive measure of CPQ by combining past experience with a wide array of other qualifications. Gerber (1998) eschews the creation of a scale in favor of using five separate dummy variables representing five separate levels of office. Since one of the aims of this dissertation is to adhere to Gerber's methodology, I employ his approach in measuring CPQ.⁵

Any of the measures of CPQ that move beyond a dichotomous variable operate under the assumption that some elective offices are more valuable than others. There is

ample research on the pattern of political careers to suggest that a definite hierarchy of elective offices exists (Black, 1972; Matthews, 1984; Mezey, 1970; Rohde, 1979; Schlesinger, 1966). For example, most people would agree that the position of governor is more valuable than that of small town mayor, or that the position of U.S. Representative carries more weight than state legislator. By placing the separate offices into a hierarchy, one can better establish whether a candidate who held a particular office should or should not be considered high-quality.

Once a researcher recognizes that different offices vary in terms of their intrinsic value, then the question becomes how to correctly capture the appropriate position of each office in that hierarchy. Until recently, there was no empirical justification for placing one office over another. For instance, some measures placed governors over U.S. Representatives even though there was no empirical evidence to suggest that governors garner a higher percentage of the vote when running for the Senate. Lublin's (1994) study was the first to empirically analyze this issue.

Lublin writes that "only after determining the relative impact of having held any particular office on the vote for the challenger can one rank offices, and thus challenger quality, on a hierarchical scale" (1994: 230). To determine the relative value of prior office experience on the vote, he regresses the vote for senatorial incumbents on a set of dummy variables measuring the office held by the challenger, as well as standard political and economic control variables. He finds that challengers who served as U.S. Representatives receive "a greater boost at the polls than former governors and other statewide officials" (Lublin, 1994: 238). He also finds that statewide offices provide a higher value, in terms of votes, than local offices and state legislative posts.

The insight gained from Lublin's study is applied to the measure of CPQ used in this dissertation. Specifically, Lublin's results help guide my judgment in ranking the

prestige of offices. For Senate elections, prestigious offices include governor, former senator, U.S. Representative, other statewide official, and mayor of a major city. For House elections, prestigious offices include former U.S. Representative, statewide official, state senator, and mayor or commissioner of any city.

CHALLENGER CELEBRITY

Krasno and Green's scale assigns an additional point to challengers who have attained celebrity status. As my equation indicates, celebrity is also used as a separate dummy variable. Including this variable when specifying the model is important because it highlights the fact that some challengers have special attributes quite apart from any previous political experience. For example, had Warren Beatty or Donald Trump actually run for president in 2000 (God forbid!!), they would certainly have had an advantage over some obscure third-party candidate, even though neither man has ever held elective office.

I follow the guidelines laid out by Abramowitz (1988) for deciding whether to code a challenger as a celebrity. Based on the aforementioned election preview summaries in the *Congressional Quarterly*, a challenger is considered a celebrity "if he [or she] was a prominent public figure because of his [or her] activities before seeking elected office" (Abramowitz, 1988: 401). Some examples of celebrity challengers include Oliver North (White House operative), Fred Thompson (actor), and Jack Lousma (astronaut).

STATE/DISTRICT PARTISANSHIP AND IDEOLOGY

Any study focusing on factors that influence elections should control for partisanship and ideology. Over the years, extensive analysis of these two factors has revealed their impact on election results (Campbell, Converse, Miller, and Stokes, 1960; Kelly and Mirer, 1974; Maggiotto and Piereson, 1977; Markus and Converse, 1979; Nie, Verba, and Petrocik, 1979; Niemi and Weisberg, 1993; Page, 1978; Page

and Jones, 1979). The problem, though, is finding a reliable means for measuring them. For over thirty years, political scientists have wrestled with the problematic task of finding dependable substitutes.

A substitute is necessary because of the tenuousness of relying on information gleaned from primary sources. Using state registration information to determine partisanship is not helpful because many states do not require citizens to declare a partisan affiliation. Even when a state does require a declaration of partisanship, that information, as it pertains to individual districts within the state, is not maintained at a central location. If obtaining information on partisanship presents such a daunting task, then locating hard data on ideology is the research equivalent of finding the Holy Grail—and Indiana Jones is not a member of the APSA.

The next best alternative is to get the needed information via a survey. The difficulty with this option is administering a survey to enough people to accurately gauge the attitudes and predispositions of the actual electorate. For example, Miller and Stokes (1963) relied on actual survey data gathered in the 1958 American National Election Study, but that survey provided an average district sample size of only 13 respondents. This paltry sample size at the district level calls into question the validity of that study's findings (Erikson, 1978; Page, Shapiro, Gronke, and Rosenberg, 1984). To be able to rely on public opinion to determine partisanship and ideology, one would need to conduct a survey that includes far more respondents than the typical national survey does, but a lack of time and money eliminate this route as an option.

Instead, researchers have come to rely on presidential election returns (Carson and Oppenheimer, 1984; Fleisher, 1993; Glazer and Robbins, 1985; LeoGrande and Brenner, 1993; Schwarz and Fenmore, 1977). These scholars assert that presidential election returns are an adequate proxy because they cover both the state and district level, represent actual constituency behavior, and consistently occur every four years,

which allows for time-series analysis. While most studies use returns as a substitute for ideology, they have also been used as a substitute for partisanship. An article by LeoGrande and Jeydel (1997) spotlights some troubling drawbacks to using this as a proxy for either electoral factor.

There are two assumptions that must hold in order for presidential election returns to be a valid proxy: "(a) that short-term factors determining the vote have a fairly uniform effect across subnational constituencies and (b) that constituency ideology [or partisanship] is the only significant long-term factor affecting the vote" (LeoGrande and Jeydel, 1997: 6). Using Pearson correlations, the authors find that the average correlation between presidential elections at both the state and district level is approximately .50; far below the frequently used benchmark of .80. This shows that short-term forces have differing impacts on specific states or districts from election to election, which makes it hard to gauge any long-term predispositions.

LeoGrande and Jeydel test the second assumption by conducting principal components analysis. They find that there are, in fact, two significant dimensions that account for the vote. These dimensions translate into the long-term factors of ideology (60.3 percent of the variance) and partisanship (21.8 percent of the variance). Their results are similar to those of Macdonald and Rabinowitz (1987).⁶ With both factors maintaining a significant influence on the electorate's voting decisions, presidential election returns should not be used as a proxy for either one of them. This proxy cannot be justified because researchers cannot reliably discern which specific long-term factor they are tapping into.

The variables that I use to measure state/district partisanship and ideology avoid some of the pitfalls discussed above. First, there are two distinct variables, which eliminates any ambiguity about what is being measured. Second, the variables are

culled from surveys that have been pooled together over time to provide a reliable number of respondents. Finally, the surveys were conducted over a long enough period to allay any concerns about the results being temporal quirks.

Both variables are drawn from the work of Erikson, Wright, and McIver (1993). Their study establishes the partisan and ideological temperament of a state based on CBS-New York Times surveys conducted between 1974 and 1988. These pooled surveys enable Erikson et al. to produce measures calculated from two self-placement questions. They test these measures by correlating them with several state polls and find correlations around the .80 range. They appear to have arrived at a reasonable estimation of a state's general partisan and ideological placement. Erikson et al. (1993) write,

In the CBS/NYT surveys, respondents' partisanship is measured by their answers to the question, "Generally speaking, do you consider yourself a Republican, a Democrat, an Independent, or what?" Ideology is assessed by asking the questions: "How would you describe your views on most political matters? Generally, do you think of yourself as liberal, moderate, or conservative?" These questions are similar to the standard American National Election Study questions on partisan and ideological identification.

[Tables B.1 and B.2] present the results of our state aggregations for the 48 contiguous states plus the District of Columbia. (No estimates are available for Alaska and Hawaii.) Shown are the percentages for each self-identified partisan and ideological category, as well as the number of usable respondents on which they are based. State positions on the two trichotomized measures are summarized as mean positions. These means are calculated by assigning a score of -100 to each Republican or conservative, a score of 0 to each Independent and moderate, and a score of +100 to each Democrat or liberal and then calculating the mean in the standard way. Measured in this metric, the mean has an easy interpretation as the relative percentage point difference between the Democrats and Republicans or between liberals and conservatives (14 & 17).

Because Alaska and Hawaii are excluded from the original analysis, I create a measure for these states. Erikson et al. note that states of the Pacific Rim are liberal, while Northwestern-Mountain states tend to be conservative. Since the past

electoral history of the two states and the Americans for Democratic Action (ADA) scores of their senators show Hawaii to be Democratic-liberal and Alaska to be Republican-conservative, I compute the mean partisan and ideological score of similar states and use this as a substitute. California, Oregon, and Washington are used for Hawaii, while Utah, Idaho, and Wyoming are used for Alaska.

Because the Erikson et al. data only gauge partisanship and ideology at the state level, I use a variation on their measure for the district level. Garand and Ardoyn (1999) have developed a statistical procedure for using the state-level scores computed by Erikson et al. to simulate district-level scores. Basically, state-level data is used to estimate the relationship that state partisanship and ideology have to various demographic and political variables. Once the parameters of this state model are estimated, then analogous data from U.S. House districts are substituted into the model to yield predicted levels of partisanship and ideology for House districts. These simulated scores can be interpreted in the exact same way.⁷ This provides me with a fair degree of confidence as I expand my study to include House races, since the simulated scores exhibit the same strengths as the original data from which they are estimated.

ECONOMIC VARIABLES

Since economic conditions affect elections, a variable measuring the level of a state's unemployment in the election year is used. This variable is also interacted with a dichotomous variable measuring whether the incumbent is in the same party as the president. A high level of unemployment should benefit all challengers, especially those that are not in the party of the sitting president.

There are no readily available statistics on unemployment in individual districts. Although districts will vary within a state, the literature on sociotropic voting suggests that perhaps voters will be more concerned with the macro-conditions of the state;

thus, even if their own community may be thriving, they may still cast a ballot based on the overall condition of the state (Lewis-Beck, 1988). However, this type of economic voting has not been clearly established. Rather than include these economic variables based on such a tenuous amount of information, it is prudent to exclude them from the House model.

INCUMBENT-CENTERED VARIABLES

The model specifies three variables that account for campaign-specific situations that affect election outcomes. Part of the allure of politics is the energy and excitement generated when vivid personalities clash in the swirling cauldron of a campaign. A fiercely contested campaign often takes on the dimensions of both a championship fight and a suspense novel. Incumbents are content to sail to reelection without any such drama, but know that a perceived personal transgression can invite strong competition. Such negative incidents are often unique to specific campaigns and can alter these campaigns in differing ways.

However, negative perceptions of incumbents do produce one fairly uniform result: incumbents fare worse than they normally would. This manifests itself in lower victory margins or outright defeat. In such situations, high-quality challengers sense that there is blood in the water and move in for the kill. Even if incumbents do survive, they are often left in a weakened state. The goal for incumbents is to avoid being placed in that situation to begin with. In the language of my model, this means avoiding scandal and controversy.

An incumbent scandal involves "allegations in the media of illegal activities," while an incumbent controversy involves "incidents that were reported by the media and raised questions about the incumbent's honesty, judgment, or competence" (Abramowitz, 1988: 400). Another condition that can negatively impact an incumbent's chances for reelection is poor health. If voters perceive that an incumbent does not

possess the vigor and stamina necessary to adequately perform in office, they may decide to replace him or her with someone who does. All three variables are dichotomous and are constructed from information found in the *Congressional Quarterly*.

PARTY

A dummy variable is included for party for each year in order to account for national partisan tides that influence local elections. There are certain election years where the public mood is firmly in favor of one of the two parties, and this will either positively or negatively affect incumbents depending on their party affiliation. For instance, Republicans were running for cover in 1974 and running toward the spotlight in 1994. A strong national partisan swing does not nullify other factors, but does serve to accentuate them.

ESTIMATION PROCEDURE

As mentioned in an earlier section, the fact that both spending variables are correlated with the error term makes it undesirable to apply the usual estimation procedure of ordinary least-squares (OLS). Rather, a procedure must be employed that accounts for this endogeneity problem and produces reliable results. King (1989) notes,

...the identification of this model of reciprocal causation leans heavily on the theoretical specification of [the different variables]. If substantive theory provides insufficient guidance to make these specifications, parameter estimates with maximum relative likelihoods are not unique. In the history of statistics, a large number of estimators have been proposed for this model and its close relatives. Most were proposed due to easier computational efficiency or as incremental improvements over the prior state of the literature. A mutually nonexclusive list includes two stage least squares (also known as 2SLS), three stage least squares (3SLS), generalized least squares (GLS), indirect least squares (ILS), *K*-class estimators, double *K*-class estimators, *K*-matrix-class estimators, limited information maximum likelihood (LIML), instrumental variables estimators (IV), and nonlinear versions of each (200).

This study employs an instrumental variables (IV) approach. The instrumental variables must be correlated with the two spending variables and be uncorrelated with the error term, and by extension, with the vote total. Challenger wealth and state/district population fulfill these two requirements. These instrumental variables, along with the other exogenous variables in the model, are used in two stages.

FIRST STAGE: The endogenous regressors are treated as dependent variables and are each regressed onto the instrumental variables, plus the other exogenous regressors. This reduced form produces a predicted value for incumbent/challenger spending, known as an instrumental variable estimator.

Incumbent Spending = Governor, Senator, U.S. Representative, Major, Minor, Celebrity, Controversy, Scandal, Health, State District Partisanship, Ideological Distance, Unemployment, Unemployment*Party, State District Population, Challenger Wealth, Error Term.

Challenger Spending = Governor, Senator, U.S. Representative, Major, Minor, Celebrity, Controversy, Scandal, Health, State District Partisanship, Ideological Distance, Unemployment, Unemployment*Party, State District Population, Challenger Wealth, Error Term.

SECOND STAGE: The predicted value is then inserted into the next equation. Purged of the endogenous variables, this equation should produce accurate, consistent coefficients. This process of estimation allows for greater veracity in gauging the effects of candidate spending on the vote.

Incumbent Vote % = Incumbent[^]Spending, Challenger[^]Spending, Governor, Senator, U.S. Representative, Major, Minor, Celebrity Challenger, Incumbent Controversy, Incumbent Scandal, Incumbent Health, State District Partisanship, Ideological Distance, State Unemployment Level, State Unemployment Level*Incumbent in Governing Party, Party, Error Term.

CONCLUSION

The attention focused on the Clinton administration's fundraising activities, and political figures such as John McCain and Bill Bradley reveal that the issue of campaign finance is very much on the national agenda. The majority of citizens may not explicitly point to campaign finance as a pressing issue, but surely their expressed concern over the perceived disconnect between the government and the governed is, in part, derived from this issue. Such a political environment makes this study relevant and, hopefully, beneficial.

Some view the current trends in campaign spending as troubling and call for reforms, while others view these trends as benign and prefer the status quo. This study is not intended to reinforce any particular argument or to offer support to either side in the campaign finance debate. Rather, it is intended as an exploration of the role that money has played in congressional elections over the past two decades. Having a clearer understanding of money's role will help inform the current debate, and an informed debate is infinitely better than one mired in ignorance. Trying desperately to avoid sounding like Kenneth Starr, I merely want an impartial, objective examination of the facts.

Of course, my findings may tend to lend credence to one side over the other. Once the basic facts have been established, the path upon which future legislation should travel may appear clearer. An analysis of the results may cause me to favor certain types of reform and to offer my recommendations in another study. If any, or all, of these things turn out to be true, then so be it. After all, one of the four roles of research is prescription. The key is that one's prescription be based on sound logic, and this requires an appreciation of relevant facts. So, this study is more concerned with the other three roles of research: observation, explanation, and prediction.

END NOTES

- 1) Open seat elections and elections with missing variables are excluded from the data set.
- 2) The sources used for this information are the bi-annual editions of *The Almanac of American Politics*, as well as reports issued by the FEC.
- 3) In fact, individuals or interest groups who wish to maximize the impact of their contributions might prefer donating money to senators from small states. Since the cost of campaigning is usually lower in small states (Brown, 1992), a contribution can increase spending per voter more dramatically in small states than in large ones. For instance, a \$5,000 contribution will go farther in Maine than in California, and by extension, the senator on the receiving end may be more grateful; financial donors get more bang for the buck. This is not to say that senators from small states raise more money than those from large states, but only that senators from small states are ahead of the curve when one factors in state population size. Dianne Feinstein may raise more actual dollars than Olympia Snowe, but Snowe more than holds her own when it comes to per capita fundraising, because she need only raise one-fiftieth of what Feinstein does.
- 4) See the Supreme Court decision in *Wesberry v. Sanders* (1964) which forwarded the "one person, one vote" doctrine and eliminated malapportioned districts.
- 5) Gerber divides candidates into five categories based on previous political experience: governor, U.S. Representative, major state or local official, minor public official, and no previous elected office. I include a sixth--senator--to capture those few instances where former senators sought to recapture that office.
- 6) Macdonald and Rabinowitz find a bit more parity between the two dimensions, but also conclude that the importance of ideology has been rising since the mid-1960s.
- 7) Erikson et al. and Ardoin and Garand measure these variables in the Democratic and liberal direction. I am concerned with whether a district's partisanship and ideology are consonant with its incumbent's partisanship and ideology. So I recode these two variables in a way that allows me to gauge this relationship. If the incumbent is a Democrat, then I multiply by 1. If the incumbent is a Republican, then I multiply by -1. By performing this function, I ensure that all of the numbers are measured in the incumbent's direction.

CHAPTER FIVE: A DESCRIPTIVE ANALYSIS OF THE DATA

There are essentially two ways to determine the outcome of any election: examine the percentage of the vote captured by each candidate involved in the race, or simply look at who won and lost. Of course, the latter standard is the one that really matters. The saying that "close only counts in horseshoes and hand-grenades" is certainly applicable to U.S. elections. It does not matter if a candidate garners 49.9% or .01% of the vote, in both cases he or she walks away with nothing.¹ Victory brings acclaim and opportunity, while defeat brings a pat on the back and a "better luck next time."

While hardball practitioners of politics may only care about winning and losing, academicians who study politics have additional concerns. The dichotomous nature of the won-lost standard makes its utility somewhat limited in a study of elections. Though dichotomous variables are often useful—and sometimes the only measures available—for modeling political behavior, they are also blunt instruments. One way to assuage this bluntness is to construct continuous variables, which allow for a more nuanced approach.

This is why vote percentages are valuable. By looking at the percentage of the vote that a candidate receives, one has more latitude in estimating the impact of particular factors on election outcomes. For instance, assume that there are two challengers who are identical in every way, except that one has previously held elective office and the other has not. Also, assume that previous experience in elective office translates into five percentage points, above and beyond what a candidate would receive otherwise. Finally, assume that these extra five percentage points are not enough to surmount the lead held by the incumbent, so that both challengers are defeated.

An analysis relying on the dichotomous measure would show the results for both challengers to be the same: they lost. An analysis relying on vote percentages would highlight the fact that the challenger with previous electoral experience performed better. He or she may have lost, but that loss was by a smaller margin, and that smaller margin can be accounted for. This is useful information. The scholarly community now knows that challengers with previous electoral experience wage campaigns that are more potent and have a greater likelihood of success.

In examining my results for House and Senate elections, I employ both of the above standards. In this chapter, I look at some relevant descriptive statistics, many of which are centered around the number of challengers who were victorious. The next two chapters contain various regression results. All of the regression equations have the incumbent's percentage of the two-party vote as their dependent variable.

CHALLENGER POLITICAL QUALITY

Challenger political quality (CPQ) stands alongside candidate expenditures as the variables of most interest. Its importance derives from the fact that it serves as a proxy for a candidate's visibility among voters. Of course, the ideal would be to have survey data that directly measured the voters' awareness of candidates for all of the elections encompassed in this dissertation. That kind of data set does not exist and would take a lot of time and money to create. So, CPQ is called upon to serve as a substitute, and it is a reliable one.

At the core of any CPQ measure is whether or not a challenger has prior political experience in elective office. All of the approaches to measuring CPQ discussed earlier (see Chapter 4) have one common thread: previous elective office. Some researchers suggest that this information alone is a sufficient gauge of candidate quality (Jacobson, 1978), while others contend that additional information needs to be

added in an effort to elaborate on the various aspects of candidate quality (Green and Krasno, 1988; Squire, 1989). Why is previous elective office so critical to CPQ?

Perhaps more than anything else, prior political experience is the best indicator for how a candidate will perform in a campaign. A challenger who has previously held elective office has a proven record of successfully running a campaign.² One of the hallmarks of a successful campaign is connecting with a significant proportion of the electorate. Also, past electoral success indicates that a candidate is at least somewhat proficient at organizing, fundraising, advertising, and other activities required for victory.

In most instances, a challenger with previous experience in elective office should run a better campaign than a challenger with no such experience. Furthermore, a vigorous campaign should attract more attention from the electorate than an anemic one. Therefore, challengers who have held elective office should be better able to attract the attention of voters; they should have a higher degree of visibility. This is the logic behind using CPQ as a proxy for a candidate's visibility among voters. It is a sound logic and CPQ is a sound concept. Now let us turn to an examination of the actual data.

Based on my general theory of expenditure effects, there are several specific hypotheses that one would expect to demonstrate in regard to CPQ. First, higher quality challengers for both the House and Senate should spend more money in campaigns, on average, than their lower quality counterparts. Second, higher quality challengers for both chambers should win a greater proportion of the races that they enter relative to lower quality challengers. Third, campaigns for the Senate should attract a greater proportion of high-quality challengers than campaigns for the House.

In Table 5.1, I present average expenditures for incumbents and challengers for the twenty years under review, as well as a breakdown by decade. In Tables 5.2 and

5.3, I present average expenditures by challengers grouped into six categories based on previously held office. The main thing to be determined from these tables is whether or not high-quality challengers do indeed spend more than low-quality challengers. Table 5.1 is mentioned because it is also useful to see how high- and low-quality challengers compare to the overall average for challengers.

Table 5.1 Average Expenditures by House and Senate Candidates, 1974-94.

Years	Incumbents	Challengers	N
House			
1974-1994	\$292,204	\$123,893 (.25)	3163
1974-1978	\$158,400	\$100,956 (.32)	881
1980-1988	\$311,103	\$135,277 (.24)	1434
1990-1994	\$399,257	\$128,471 (.20)	848
Senate			
1974-1994	\$2,453,085	\$1,316,491 (.30)	280
1974-1978	\$1,493,668	\$ 872,825 (.36)	64
1980-1988	\$2,448,327	\$1,273,844 (.29)	136
1990-1994	\$3,228,708	\$1,743,926 (.26)	80

Note: Figures are in real 1982-1984 dollars. Figures in parentheses represent challenger spending as a proportion of total spending.

Regarding the six categories, even though each office is treated as a separate entity, rather than being arranged along some scale, there should be little argument over the fact that some of these offices are more prestigious than others. I propose that the

Table 5.2 Average Expenditures by House Challengers--Previous Elective Office, 1974-94

Previous Office	Expenditures	N
Governor	\$74,734	2
Senator	\$146,516	1
U.S. Representative	\$325,160	44
Major	\$232,600	173
Minor	\$187,569	470
No Elective Experience	\$101,343	2860

Note: Figures are in real 1982-1984 dollars.

Table 5.3 Average Expenditures by Senate Challengers--Previous Elective Office, 1974-94

Previous Office	Expenditures	N
Governor	\$2,427,509	13
Senator	\$2,039,803	2
U.S. Representative	\$2,235,425	49
Major	\$1,836,088	34
Minor	\$617,484	70
No Elective	\$1,021,198*	111

*This figure is misleading due to the exorbitant sum of money spent by Oliver North in his 1994 bid for the Senate. Excluding North's \$13,905,106, the average figure is \$904,071. All figures are in real 1982-1984 dollars.

six categories be viewed as representing three levels of prestige. The top echelon of offices are governor, senator, and U.S. Representative. The intermediate level covers major statewide elected officials other than governor, as well as mayors of important cities. The lowest level covers those elected to minor offices, along with those who have never been elected to office.

Certainly a governorship is qualitatively far superior to any other statewide office; to a certain degree, governors can be thought of as the presidents of their individual states. While they do not have the awesome powers of the presidency and do not really have to deal with foreign policy, they are chief-executives and chief-legislators in their states. This may be one of the reasons why governors have been more successful than congressmen in getting elected to the highest office in the land. Meanwhile, senators and representatives are federal officeholders who share the cachet of being only one of 535 legislators to serve their country in Washington D.C..

Major statewide and local offices do confer a certain degree of status on those who occupy them, but in most instances, they do not have the luster of the top echelon.³ However, those who hold these offices should be viewed as higher quality candidates than those found on the lowest level. Having been a county commissioner or a member of a small town school board simply does not compare to having been a U.S. Representative or a state attorney general. Taking these distinctions into account, let us proceed with an analysis of the data.

Looking at races for the House, the numbers perfectly match expectations. Because the number of former governors and senators who ran in House races is too small to be of much probative value, it is sensible to set these two categories aside. Once this is done, the other four categories line up as predicted. Former U.S. Representatives have the highest average expenditures at approximately \$325,000,

followed by major officeholders at approximately \$233,000. Minor public officials spent an average of \$189,000, with those holding no elective office bringing up the rear with around \$101,000.

Likewise, spending figures for Senate races pretty much unfold as expected. Those in the top echelon of offices spent an average of over \$2 million in their campaigns. Governors spent the most, followed by representatives and senators. Major officeholders were next in line at approximately \$1.8 million. Challengers from the two low-quality categories failed to clear one million dollars in spending, with minor officeholders coming in at \$617,000, and those with no prior office spending an average of \$904,000.⁴

For House and Senate campaigns, high-quality challengers do, in fact, spend more money than low-quality challengers. High-quality challengers for both chambers also have expenditures that exceed the overall average for challengers, while those challengers from the two low-quality categories have expenditures that are below the average for all challengers, with the exception of minor officeholders campaigning for the House. The first hypothesis passes muster.

While it is instructive to look at the amount of money spent by candidates, it is also beneficial to view these expenditures as a proportion of total spending. It is especially important to view challenger spending within this context. What might seem like an impressive sum of money may actually be a pittance when compared to the incumbent's output. We know that the average amount spent by House challengers is roughly \$124,000, but how does this amount stack up against what incumbents are spending? Determining the proportion spent by challengers in a campaign gives us an understanding of how competitive challengers are from a financial standpoint.

In Table 5.1, the numbers in parentheses show challenger spending as a proportion of total spending. The proportion of money spent by challengers in House

campaigns has steadily dwindled over the years. In the 1970s, challengers accounted for 32% of total spending in a campaign. In the following decade, that percentage fell to a quarter of all expenditures. By the 1990s, challengers accounted for a mere 20% of total spending.

While the proportion of spending accounted for by Senate challengers is greater, across the board, than that accounted for by House challengers, the numbers are still anemic. From a high of 36% in the 1970s, the trend has been downward. In the 1990s, their expenditures were only 26% of the total spent. It is plain to see why incumbents continue to return to office with the slightest of ease. The overall numbers for House and Senate challengers point out their financial disadvantage in stark detail.

In Tables 5.4 and 5.5, I place the total number of challengers for the House and Senate into the six CPQ categories, along with the number of those who were victorious. The findings conform to expectations. Beginning with House races, once governors and senators are excluded due to the small number of observations, the other categories basically fall into place. Of the 44 former representatives who sought another trip to the House, 25% of them were successful. Of the 173 who held a major office, 14% were successful. The minor office category does not match expectations in that these challengers were as successful at winning office as their major office counterparts.

Upon further consideration, however, this result is not too surprising. House districts are relatively small, so it is possible that someone holding a minor office might have a decent shot at winning. However, the odds of victory become much smaller when one competes for statewide office. Those minor candidates who are able to sneak through in a House race face a much bigger problem when trying to win a Senate seat. This is borne out in results shown in Table 5.5. Finally, those challengers with no elective experience lag well behind with only a 4% success rate.

Table 5.4 Winning Challengers in House Elections--Previous Elective Office, 1974-94

Previous Office	Total Challengers	Winning Challengers	%
Governor	2	0	0
Senator	1	0	0
U.S. Representative	44	11	25
Major	173	25	14
Minor	470	67	14
No Elective	2860	120	4

Table 5.5 Winning Challengers in Senate Elections--Previous Elective Office, 1974-94

Previous Office	Total Challengers	Winning Challengers	%
Governor	13	5	38
Senator	2	1	50
U.S. Representative	49	16	32
Major	34	8	23
Minor	70	6	8
No Elective	111	14	13

In races for the Senate, things also pretty much hold to expectations. Discounting the senate category (there are only two entries), the other top echelon offices yield a higher proportion of victories than the lower offices. Of the 13 challengers in the governor category, 38% were successful. 32% of the 49 representatives were successful. Dropping to the next level, of the 34 who held a major office, 23% achieved victory. This is much higher than the 8% of minor officeholders, out of 70, who won. The only glitch in the results for Senate races is that of the 111 with no elective office, 13% were successful—a higher percentage than for minor officeholders.

So, looking at races for both chambers one finds that, with only one exception, challengers at higher levels won a greater proportion of the races that they entered

Table 5.6 Challengers for House and Senate Campaigns--Previous Elective Office, 1974-94

House N=3163		Senate N=280	
Governor	2 (.10)	Governor	13 (4.6)
Senator	1 (.00)	Senator	2 (.70)
U.S. Rep.	44 (1.2)	U.S. Rep.	49 (17.4)
Major	173 (4.8)	Major	34 (12.4)
Minor	470 (13.1)	Minor	70 (24.8)
No Elective	2860 (80.0)	No Elective	111 (39.7)

Note: Numbers in parentheses are percentages.

compared to challengers at lower levels. And when looking at the six categories of offices separately, there are only two instances when higher quality challengers did not have a greater proportion of victory than lower quality challengers. The second hypothesis comes through nicely.

The final area to be explored concerning CPQ is whether or not there are a greater proportion of high-quality challengers running for the Senate compared to those running for the House. Referring to Table 5.6, the results show that this is the case. Out of the 3,000-plus House campaigns analyzed in this dissertation, there were only two former governors and one former senator who competed in them. This produces a percentage so minuscule as to be irrelevant. Barely 1% of challengers for the House had served in that institution previously, while only 5% had held a major statewide or local office. Minor officeholders accounted for a little over one-tenth of the pool of challengers. The overwhelming percentage of challengers (80%) for the House had no previous experience in office.

As for Senate races, there were only two former senators accounted for in the 280 contests under examination in this study. But the percentages are comparatively higher for the positions of governor (approximately 5%), representative (17%), major officeholder (12%), and minor officeholders (25%). Naturally, this dispersion means that there are far fewer challengers (40%) in Senate contests who have never held office. These numbers conclusively demonstrate that Senate challengers are of a higher quality than House challengers, as predicted by the third hypothesis.

CHALLENGER EXPENDITURES

Before moving on to some of the other variables in my model, I want to explicitly address an issue concerning challenger expenditures. Many people argue that because money is so important in campaigns, it can often be the determining factor in

election outcomes. Those candidates who outspend their opponents will win more times than not. And if challengers are more dependent on spending than incumbents, then outspending an opponent is especially critical for them. Is this true?

Table 5.7 casts some light on this question. Of the 222 challengers who defeated incumbents in elections for the House, 85 (38%) of them outspent the incumbent. Of the 50 challengers who defeated incumbents in elections for the Senate, 18 (36%) of them outspent the incumbent. This would seem to indicate that it is not necessary to outgun an incumbent in order to achieve victory.

Table 5.7 Victories in Relation to Spending by House and Senate Challengers, 1974-94

House

222 challengers defeated incumbents--85 (38%) of these outspent incumbents

349 challengers outspent incumbents--85 (24%) of these were victorious

2814 challengers did not outspend incumbents--137 (5%) of these were victorious

Senate

50 challengers defeated incumbents--18 (36%) of these outspent incumbents

38 challengers outspent incumbents--18 (47%) of these were victorious

242 challengers did not outspend incumbents--32 (13%) of these were victorious

Viewing this question from a slightly different angle, of the 349 House challengers who outspent incumbents, 85 (24%) of them won the election. But of the 2814 challengers who spent less than incumbents, only 137 (5%) of them were victorious. In Senate elections, 38 challengers outspent incumbents and 18 (47%) of

them were successful. But of the 242 challengers who spent less than incumbents, only 32 (13%) of them won the election. These figures paint a more complete portrait of what I think is the true relationship between expenditures and victory.

Money *is* more important to challengers than to incumbents. Incumbents have an array of resources at their disposal in seeking reelection, while challengers must often rely more heavily on campaign expenditures to establish themselves and create momentum in a campaign. Just because money is more crucial to the success of a challenger's efforts does not necessarily mean that it is the ultimate arbiter of victory and defeat. There are, of course, other factors involved in elections, hence the use of multivariate as opposed to bivariate equations; I will explore some of these other factors shortly.

The key point to remember about challenger spending is this: financial parity is usually a necessary but not a sufficient condition for success. Spewing forth money like a human teller machine is not enough to ensure victory, and thank goodness that it is not. Citizens should expect more from candidates, especially relatively unknown challengers, than a fat wallet. On the other hand, challengers who are unable to be financially competitive with incumbents have almost no chance of winning. For poor challengers, Capitol Hill is not a career destination, but a vacation destination. In the final analysis, challengers should recognize that a spending advantage provides a better chance for victory, not a guarantee of one.

INCUMBENT CONTROVERSY AND SCANDAL

Contrary to public opinion, which is often shaped by the media, all politicians are not unethical and crooked. By and large, politicians are conscientious about their jobs and try to perform their duties as public servants admirably. But as in any profession, there are occasions when some people fall short of the mark. Unlike other

professions, the punishment doled out for such transgressions is decided by the public via a ballot, rather than by a supervisor via a pink slip.

Following the lead of Abramowitz (1988), I classify political wrongdoing into two categories: controversies and scandals. A controversy is when incidents call an incumbent's honesty, judgment, or competence into question. A scandal is when an incumbent is alleged to have been involved in illegal activities. In Tables C.1 and C.2, I list the campaigns where one of these two were present.⁵

I hypothesize that challengers should win a greater proportion of elections involving incumbent controversies or scandals compared to their overall rate of victory. Furthermore, I would expect that the proportion would be greater for elections involving scandals as opposed to those involving controversies, since the wrongdoing involved in scandals is usually of a more serious nature. These incidents do not occur in a vacuum, so that potential challengers are aware that there is blood in the water. In an effort to capitalize on an already favorable situation, the eventual challengers should spend more money than usual in the campaigns, and should be aided in this cause by contributors who also see a real opportunity for change. Thus, I also hypothesize that average challenger expenditures will be higher in elections involving incumbent controversies or scandals compared to overall average challenger expenditures. Furthermore, I would expect that challenger spending would be higher in elections involving scandals as opposed to those involving controversies, for the reason cited above.

Tables 5.8 and 5.9 illustrate that both hypotheses are borne out. In House elections involving incumbent controversy, challengers won 26% of the time; in House elections involving incumbent scandal, that figure jumps to 48%. Both of these are higher than the overall percentage (6%) of victory for challengers in House elections. In Senate elections involving incumbent controversy, challengers won 28% of the time;

Table 5.8 Victories by Challengers in Campaigns Involving Incumbent Controversy or Scandal, 1974-94

House

3460 elections without incumbent controversy or scandal--challengers won 191 (6%)

86 elections involved incumbent controversy--challengers won 22 (26%)

31 elections involved incumbent scandal--challengers won 15 (48%)

Senate

248 elections without incumbent controversy or scandal--challengers won 40 (16%)

25 elections involved incumbent controversy--challengers won 7 (28%)

7 elections involved incumbent scandal--challengers won 3 (43%)

Table 5.9 Average Expenditures in Campaigns Involving Incumbent Controversy or Scandal, 1974-94

House

Neither:	Incumbent-\$275,335	Challenger-\$120,369
Controversy:	Incumbent-\$462,202	Challenger-\$206,147
Scandal:	Incumbent-\$287,037	Challenger-\$221,227

Senate

Neither:	Incumbent-\$2,376,635	Challenger-\$1,236,111
Controversy:	Incumbent-\$3,293,767	Challenger-\$2,117,820
Scandal:	Incumbent-\$2,159,190	Challenger-\$1,302,382

Note: Figures are in real 1982-1984 dollars.

in Senate elections involving incumbent scandal, that figure increases to 43%. Both of these are higher than the overall percentage (16%) of victory for challengers in Senate elections.

In House elections involving incumbent controversy, challengers spent an average of approximately \$206,000; in House elections involving incumbent scandal, challengers spent approximately \$221,000. Both of these are higher than the overall challenger average of \$124,000. In Senate elections involving incumbent controversy, challengers spent an average of approximately \$2,100,000; in Senate elections involving incumbent scandal, challengers spent roughly \$1,300,000. The overall challenger average is \$1,300,000. So, only the final subset of elections provides a glitch in terms of my expectations.

As a sidenote, incumbent spending in these types of elections exhibits a curious pattern. Remember that the general theory of candidate spending guiding this dissertation assumes that incumbents adjust their level of spending to match the perceived level of threat. If they anticipate a tough race from a qualified opponent with ample financial resources, then they respond with a torrent of cash. Surely, incumbents who are embroiled in a controversy or scandal realize that this could prompt that kind of scenario. They may have behaved foolishly, but they are not fools. This would lead one to expect that incumbents would also raise their level of expenditures in elections involving controversies and scandals, in an effort to lessen the potential negative electoral repercussions stemming from such incidents.

The evidence partially confirms this expectation. For both chambers, incumbents involved in controversies do increase their level of spending above what they spend in a normal campaign. In both cases, their expenditures actually exceed those of challengers. Incumbents involved in scandals, however, do not raise spending

levels and are outspent, on average, by challengers. So, when they are in the most trouble and should anticipate the stormiest weather, they do not respond as expected. Is there any possible explanation for this?

I think the most feasible explanation involves the initial stage of the campaign spending process. Before candidates can spend money, they have to collect it. Donors, too, are strategic thinkers when it comes to electoral politics (Jacobson and Kernell, 1981). If they think that a candidate has little chance of winning, then they are not going to waste their valuable resources on that candidate.

Even though incumbents enjoy a very cozy relationship with big-time donors, this relationship is not impervious to outside events. The question becomes how severe does a negative event have to be before the flow of cash dries up. A small controversy may not be enough to interrupt the symbiosis of donors and incumbents, but a major scandal probably will be. The reason that incumbents who are on the ropes do not dramatically increase spending is because they cannot; they do not have adequate funding. Again, this is only an educated guess that is meant to highlight yet another interesting area to be explored.

CHALLENGER CELEBRITY

There are occasions when incumbents must face challengers who are well known to a significant portion of the electorate based on factors not directly related to political life. Whether they be entertainers, athletes, scions of famous families, or some other breed of celebrity—these challengers bring something extra to the table. To the extent that celebrity challengers emerge with a higher awareness among voters than ordinary challengers, they should have an easier time overcoming the varied obstacles that face anyone trying to unseat an incumbent. For this reason, I hypothesize that celebrity challengers should win a greater proportion of the elections that they enter compared to the overall rate of victory for challengers.

Table 5.10 Victories by Celebrity Challengers in House and Senate Campaigns, 1974-94

House

53 elections involved celebrity challengers--challengers won 10 (19%) of these

Senate

10 elections involved celebrity challengers--challengers won 4 (40%) of these

Table 5.11 Expenditures by Candidates in Campaigns with Celebrity Challengers, 1974-94

House

Incumbent-\$425,283

Challenger-\$277,324

Senate

Incumbent-\$3,418,404

Challenger-\$3,467,423

In Tables 5.10 and 5.11, I list information on the results and expenditures in elections involving celebrity challengers. All of the forwarded hypotheses are borne out. Celebrity challengers in House races win 19% of the time; this is hardly a staggering percentage, but it is more than the overall 6% rate of victory. Races for the upper chamber involving a celebrity challenger result in incumbent defeat 40% of the time, which is higher than the usual 16%. Celebrity challengers for the House spend two times more than the overall expenditure average, while that figure for Senate challengers is almost three times more. In fact, the average Senate celebrity challenger actually outspends the rival incumbent by nearly \$50,000. Though both House and Senate incumbents do, as predicted, increase spending in order to meet the threat.

Publicity is not the only thing that celebrity attracts, it also attracts money. There is a reason why the late Sonny Bono was the most sought after congressman for Republican fundraising events. Not even staid "main streeters" can resist the allure of a little Hollywood dazzle. Since being a celebrity should aid challengers in attracting campaign funds, I expect celebrity challengers to have higher expenditures, on average, than other challengers. The publicity accompanying a celebrity challenger will give the incumbent plenty of time to gear up his or her own finance machinery, so that incumbent spending should increase as well.

CHALLENGER WEALTH

The final variable to be explored in this chapter is challenger wealth. As noted earlier, a vast amount of wealth does not automatically translate into political success. It should, however, translate into an enhanced ability to spend. Challengers who maintain a degree of personal wealth have deeper financial reservoirs to draw from. If necessary, they can simply write a check or secure a big loan in order to remain competitive in terms of spending. While there is no reason to believe that wealthy challengers should win more often than others, there is ample reason to suspect that wealthy challengers should spend more than others.

In Table 5.10, I show that, indeed, wealthy challengers do have higher average expenditures. Wealthy challengers for the House spend \$201,000 compared to the overall average of \$124,000, while wealthy challengers for the Senate spend \$1.98 million compared to the overall average of \$1.31 million. Incumbents' spending against wealthy challengers hovers close to their overall spending average. This makes sense when one considers that incumbents may not view wealthy challengers with as much alarm as they do high-quality opponents, personal scandals, and celebrities.

Just because a challenger has substantial wealth does not mean that he or she is willing to use it. Many wealthy challengers who are also relatively unqualified for the

Table 5.12 Average Expenditures in Campaigns Involving Wealthy Challengers, 1974-94

House

Incumbent-\$323,869

Challenger-\$201,229

Senate

Incumbent-\$2,448,395

Challenger-\$1,985,947

Note: Figures are in real 1982-1984 dollars. Refer back to Table 5.1 for average expenditures in all campaigns.

office which they are seeking may realize the quixotic nature of their endeavor and refrain from squandering a small fortune (aka. the "I am not going to be another Steve Forbes" philosophy). Others, in a fit of near delusion, may throw caution to the wind and spend like there is no tomorrow (aka. the "look how much coverage Ross Perot got" philosophy). It is almost impossible for incumbents to know in advance which route wealthy challengers will take, so they tend to be reactive. More than likely, they will wait until they detect a spending surge from the other camp before increasing their own spending. And if that surge comes in the latter stages of the campaign, poll numbers may indicate that they have no reason to fear it anyway.

High-quality opponents, personal scandals, and celebrities are all things that incumbents are aware of fairly early in the election season. Unlike challenger spending levels, these things are predictable, so that incumbents can be proactive. A high-quality challenger with experience as a governor is not going to suddenly lose that credential; a scandal is not going to suddenly disappear; a celebrity cannot choose to suddenly

become an obscure figure for the campaign. When everything is said and done, it may turn out that the incumbent was not in that much trouble after all, but that is a chance that most incumbents are unwilling to take.

CONCLUSION

This initial, descriptive look at the data provides a favorable view of the main theoretical ideas guiding this dissertation. Focusing on the percentage of victories by and the average expenditures of challengers who fit into certain categories allows one to get a feel for the topic under review. Though simple and straightforward, these descriptive techniques are valuable and insightful.

However, in order for this study to be complete, multiple regression is required. Multiple regression is the best technique for uncovering the true relationship between a candidate's awareness among voters, a candidate's expenditures, and a candidate's vote total. It also serves as a more vigorous test of the hypothesized relationships between other variables and the vote. I now turn to an analysis of my multiple regression results.

END NOTES

- 1) This is the case because of the winner-take-all system that governs U.S. elections.
- 2) Unless that challenger assumed his or her previous office via an appointment.
- 3) Mayors of world-renowned cities, such as New York and San Francisco, can be placed in that top echelon. However, they are the exceptions that prove the rule.
- 4) Oliver North's exorbitant campaign spending in the 1994 Virginia contest skews these results.
- 5) The coding procedure is as follows: I culled through relevant issues of *CQ* and coded each election as I deemed appropriate. Those cases that were not absolutely clear-cut were given to three of my colleagues. After their independent assessments, I correlated these cases. The correlation rate was .84. In those instances where there was disagreement, I used the classification that received the most votes. I offer my thanks to Jamie Pasley, Scott Crichlow, and Karrie Huggins for their assistance.

CHAPTER SIX: REGRESSION ANALYSIS OF SENATE ELECTIONS

Congressional elections are dynamic events. Ambitious candidates, powerful parties, inquisitive voters, strategic interest groups, and complex public policy issues blend together into a unique electoral stew. It should come as no surprise, then, that the results of these elections are determined by a wide array of factors. Money, the economy, partisanship, candidate attributes, and campaign-specific occurrences all impact the final decisions rendered in voting booths across the land.

In order to better understand the dynamic processes that drive congressional elections, one must be able to delineate the nature and extent of the impact that relevant factors have on the vote. For instance, the importance of money in elections truly becomes apparent only after other potential factors have been considered. If campaign spending is not made to stand beside other variables, then one cannot know for sure whether these other variables are providing an influence that is being erroneously attributed to spending. Likewise, the meaningfulness of these other variables is best determined by relating them to each other.

For social scientists, multiple regression is a valuable analytical tool. It allows researchers to do precisely the kinds of things discussed above. By controlling for other variables, one can pinpoint the significance of the variable of interest. In my case, I can get at the importance of money and challenger quality by controlling for such things as state/district partisanship, state unemployment, and an incumbent's health. I can also determine whether any of these variables interact in relevant ways, such as the effect that money has on the vote at different levels of CPQ. The following sections contain the results of my regression analysis for Senate elections.

OLS RESULTS

In terms of campaign spending, ordinary least squares is not the most efficient type of regression to perform, but it is the workhorse of political science and deserves at least a glance in this study. Other researchers (Abramowitz, 1991; Jacobson, 1978) have performed OLS on campaign spending data, but most ultimately turn to other forms of regression in an attempt to solve the endogeneity problem. Though the endogenous nature of the spending variable probably skews the OLS estimates, it is instructive to include an OLS model in order to see if my results conform to earlier OLS estimations. In a sense, OLS allows us to get our feet wet before swimming into the depths of instrumental variables and 2SLS.

In Tables 6.1 and 6.2, I present two OLS equations for the Senate. Table 6.1 contains the most basic, with incumbent and challenger spending as the only independent variables.¹ Both coefficients are highly significant and in the expected

Table 6.1 OLS Regression of the Effects of Campaign Spending--Senate

Dependent Variable: Incumbent Share of the Two-Party Vote			
Independent Variables	b	B	T
Incumbent Spending	3.279	.329	6.03***
Challenger Spending	-5.392	-.796	-14.90***
Party	2.387	.127	2.80***
R-Squared=.46			
N=279			
Note: *<.10 **<.05 ***<.01			

direction. Since this study is concerned with the relative impact that each variable has on the vote, I am also interested in comparing the strength of the two variables within the equation.

A natural inclination might be to look at the unstandardized coefficients in order to gauge the relative strength of variables, but this would be incorrect. The approach adopted by virtually all researchers is to look at the standardized (beta) coefficients. Anthony Walsh writes, "This value tells you how much a one standard deviation change in the independent variable will affect the dependent variable, also in standard deviation units, controlling for the effects of the other variables in the equation. This is an important statistic to reveal in any report because, unlike the unstandardized slope, it is a measure of the relative importance of the independent variables in the equation (1999: 282).

The results displayed in Table 6.1 are as expected. While both spending coefficients are significant, the beta for challenger spending (-.796) is more than double the beta for incumbent spending (.329). When candidate spending is isolated within an equation, challengers do indeed get a bigger bang for their buck. However, such an equation does not tell the whole story. As the R-squared indicates, the spending variables alone explain less than half of the variance. Therefore, a more complete model is required.

In Table 6.2, I present results from the full model, which lifts the R-squared to .54. The results from this equation are in harmony with the generally accepted view within the scholarly community; both challenger and incumbent spending have a significant effect on the vote, though the effect of challenger spending is greater. Notice that the beta for challenger spending (-.575) greatly exceeds the beta for incumbent spending (.222). So even when candidate spending is placed alongside other essential variables, the relative strength of challenger spending comes through.

Table 6.2 OLS Regression of the Effects of Campaign Spending--Senate

Dependent Variable: Incumbent Share of the Two-Party Vote			
Independent Variables	b	B	T
Incumbent Spending	2.096	.222	3.77***
Challenger Spending	-3.790	-.575	-9.16***
Governor	-2.453	-.055	-1.15
Senator	-3.795	-.037	-.83
U.S. Rep	-4.121	-.178	-3.37***
Major	-2.252	-.083	-1.59*
Minor	-.468	-.023	-.45
Celebrity	-5.449	-.111	-2.38***
Controversy	-2.574	-.083	-1.88**
Scandal	-4.411	-.080	-1.75**
Health	-7.907	-.121	-2.75***
Unemployment	.090	.020	.43
Unemploy*Party	-.518	-.199	-3.86***
Party I.D.	.134	.183	3.28***
Ideological Distance	.050	.024	.53
Party	-1.771	-.099	-1.68**
R-Squared=.54			
N=260			

Note: *<.10 **<.05 ***<.01

The coefficients for eleven of the thirteen remaining variables are in the expected direction. The two variables—state unemployment level and incumbent ideological distance—that are in the wrong direction have coefficients that are insignificant. Plus, when state unemployment level is interacted with a dummy variable coded one if the incumbent is in the same party as the president, it becomes highly significant. This more refined variable shows that, in distributing justice, voters tend to be fair and save their retribution for those politicians belonging to the party in power (Hibbing and Alford, 1981; Stein, 1990).² While the coefficient tapping into ideology is insignificant, its party identification counterpart is not. This supports the belief among some scholars that party is still a central factor in deciding elections, and that it serves as a more accessible guide to the average voter than does ideology (Aldrich, 1995; Petrocik 1987 and 1989; Sundquist, 1983).

In order to gauge CPQ, I constructed five separate dummy variables, each coded one if a challenger had previously held a particular elective office and zero if he or she had not held that office. Those challengers who held higher offices (senator, governor, representative, and major statewide office/mayor of important city) are assumed to be of a higher quality compared to those who held only minor offices or had no previous electoral experience at all. While I do not employ an additive scale, there is undoubtedly a hierarchy of offices. Only two of these coefficients reach significance: U.S. Representative and major office.

I am not surprised that being challenged by a former senator does not significantly decrease the vote percentage of the incumbent. In most cases, these are people who were rejected by voters in the prior election and are trying to mount a comeback. The office of senator is a prestigious one, but some of the luster wears off after suffering a recent electoral defeat. Also, these rematches are difficult for challengers because incumbents have had six years to wield all of the advantages that

come with holding office. This results in the challenger having to combat the oft-noted "sophomore surge" (Gelman and King, 1990; Holbrook and Tidmarch, 1991). If the former senator/current challenger could not achieve victory as an incumbent, then it is unlikely that he or she will do so while standing on the opposite side of the fence.³

I am a bit surprised that a challenge waged by someone with a gubernatorial pedigree is not significant. The assumption is that a governor's statewide coalition translates effectively in a run for that other prestigious statewide office: senator. Perhaps the explanation for this insignificance lies in the perceived role for each office. Senators are thought of as distant legislators, while governors are viewed as the executives who actively manage the state. The voters may not see governors in the role of senator; a governor's duties do not translate effectively to the Senate. This line of thinking is in the same vein as the argument that senators are not elected president because their legislative role is not consonant with those duties performed by the chief-executive (Bartels, 1985; Kenney and Rice, 1988).

Those challengers who held the office of U.S. Representative did have a significant influence on the vote. This is consistent with the finding that U.S. Representative is *the* most valuable office to hold, in terms of election to the Senate (Lublin, 1994). Representatives have advantages that the other top officeholders do not. Unlike former senators, representatives are usually still in office when they decide to run for a senate seat. Their candidacies are not viewed as attempts to return to the status quo—or in the case of governors, as lateral moves—but as logical moves up the political ladder. They have usually achieved a string of House victories and can bring that momentum, along with their own incumbency advantages, into the election. And since they have spent at least part of their careers on Capitol Hill, they avoid the perceptual pitfalls faced by governors.⁴ A move from the lower chamber to the upper

chamber is functionally consistent, just as a move from the city hall of a metropolis to the governor's mansion would be. They are prepared legislators and a run for the Senate is the logical next step.

The variable for major statewide officials and mayors of important cities has a coefficient that reaches significance at the .10 level. To a certain degree, these officeholders are in the same boat as representatives when it comes to mounting a challenge for the senate. They are politicians seeking upward mobility in their careers, and they have a fairly solid constituency-base from which to run. However, these offices are not as prestigious as the previously mentioned three, which means that these candidates do not benefit as fully from established reputations. They have to work harder to get the attention of the press and have a somewhat harder time convincing the public that they have the right stuff to flourish as senators.

As one might anticipate, challengers with experience only in minor offices do not, solely on the basis of that qualification, pose much of a problem for incumbents. The effect of this variable on the vote is insignificant, though in the right direction. Perhaps minor officeholders should attempt to attain a certain degree of celebrity. The variable for celebrity status does have an independent effect on the vote.

It appears that the political world is no more immune from the allure of celebrity than the rest of society. Merely having a recognizable name and face--no matter if unaccompanied by political experience and know how--is enough to threaten the comfortable existence of incumbents. Candidates are elected by an expression of the public's will, so it stands to reason that those challengers already basking in the glow of the public eye are more advantaged than run-of-the-mill challengers.

The three remaining variables in my model demonstrate that certain circumstances can arise in a campaign that significantly threaten an incumbent's electoral security. These circumstances center around the activities and health of

incumbents. Incumbents who find themselves embroiled in controversies or scandals will suffer at the polls. Incumbents who exhibit poor health are also vulnerable, both physically and electorally. This trio of variables shows that the vaunted incumbency advantage is not indestructible. If voters begin to question an incumbent's ability to carry out the duties of his or her office, regardless of whether this doubt is self-inflicted or caused by forces beyond the incumbent's control, then there is a real chance that the incumbent will be replaced.

2SLS RESULTS

Because of the non-recursive nature of the campaign spending model, it is appropriate to use an estimation technique that purges the model of troublesome endogenous variables. Two-stage least squares is the technique employed in this study. The model is exactly the same under 2SLS, except that a predicted value is substituted for actual candidate expenditures. This predicted value is derived from regressing the spending variable onto an instrumental variable (i.e. a reduced form equation). The technique is valid so long as the instrumental variable is correlated with the endogenous variable, but not with the error term. As mentioned in an earlier chapter, the instruments used in my 2SLS equations are state population and challenger wealth.

In Tables 6.3 and 6.4, I present two 2SLS equations for Senate elections. Table 6.3 contains the most basic, with incumbent and challenger spending as the only independent variables. As with OLS, both variables are highly significant and in the expected direction. The R-squared is a bit lower than that for the OLS counterpart to this equation, coming in at .42.

An initial examination of the unstandardized coefficients reveals that incumbent spending is a stronger performer than challenger spending. This is a perfect illustration of why it is a mistake to use unstandardized coefficients when comparing variables. A closer look at the equation shows that the t-value for challenger spending is larger,

Table 6.3 2SLS Regression of the Effects of Campaign Spending--Senate

Dependent Variable: Incumbent Share of the Two-Party Vote			
Independent Variables	b	B	T
Incumbent Spending	7.442	.748	5.79***
Challenger Spending	-6.944	-1.026	-11.93***
Party	3.801	.202	3.74***
R-Squared=.42			
N=279			

Note: *<.10 **<.05 ***.01

which means that challenger spending is actually more significant. A t-value is calculated by dividing the unstandardized coefficient by the standard error. So even though challenger spending has a smaller unstandardized coefficient in this equation, it also has a much smaller standard error, which is the reason why it performs better than incumbent spending. Basically, the effect of challenger spending is more homogenous, while the effect of incumbent spending is more variant.

This is borne out by a comparison of the standardized coefficients for the two spending variables. The beta for challenger spending (-1.026) is more robust than the beta for incumbent spending (.748). Again, the use of standardized (beta) coefficients in determining the relative importance of variables in an equation is the more reliable course of action for researchers. In this instance, the beta coefficients provide clear proof that Jacobson's (1978) original contention is as applicable in Senate races as it is in House races. Challengers do receive higher marginal returns on their expenditures.

Table 6.4 2SLS Regression of the Effects of Campaign Spending--Senate

Dependent Variable: Incumbent Share of the Two-Party Vote			
Independent Variables	b	B	T
Incumbent Spending	5.142	.546	3.59***
Challenger Spending	-5.125	-.778	-7.11***
Governor	-1.789	-.040	-.79
Senator	-.584	-.005	-.11
U.S. Rep	-3.698	-.159	-2.83***
Major	-1.970	-.072	-1.31*
Minor	-.265	-.013	-.24
Celebrity	-4.662	-.095	-1.91**
Controversy	-2.462	-.080	-1.70**
Scandal	-3.552	-.064	-1.31*
Health	-6.511	-.100	-2.09**
Unemployment	.305	.070	1.28*
Unemploy*Party	-.554	-.213	-3.87***
Party I.D.	.109	.148	2.44***
Ideological Distance	-.043	-.021	-.40
Party	-.591	-.033	-.48
R-Squared=.51			
N=260			

Note: *<.10 **<.05 ***<.01

In Table 6.4, I present the results from the full model. Both of the spending variables are significant at the .01 level. Again, challenger spending has a stronger effect on the vote. This finding is consistent with the findings of other scholars applying 2SLS to campaign spending (Green and Krasno, 1988). It casts some doubt on Gerber's assertion that incumbent spending is paramount in Senate elections. Certainly the difference between the two spending coefficients is smaller in this equation than in the equations previously discussed, but challenger spending (-.778) still clearly outperforms incumbent spending (.546).

It is worth mentioning again that this result is perfectly attuned to my central theory. If the favorable differential in spending effects for challengers is the result of challengers having low recognition among the electorate and thus being able to garner more benefits from spending on communications, then it stands to reason that challengers garnering higher amounts of recognition from the public would benefit less from spending. As I detailed in the previous chapter, challengers for the Senate have a higher profile than challengers for the House; thus, the difference in the effects of spending between incumbents and challengers is smaller in Senate campaigns than in House campaigns.

U.S. Representative and major statewide official/mayor of important city are the only CPQ coefficients to reach significance; none of the others even come close, though they are all in the expected direction. The explanation for this result is identical to the one offered in my discussion of the full OLS model. As for the other variables in the equation, only ideological distance has a coefficient that fails to reach significance; the other seven variables are all significant and in the expected direction.

Curiously, incumbent controversy (-.080) is more significant than incumbent scandal (-.064). This creates the counter-intuitive finding that being accused of a violation of law is less damaging to an incumbent's ability to attract votes than being

considered a bit shady or irrational. One would expect the opposite to be true. Having their honesty and judgment questioned is often considered par for the course for politicians, but as a group, they tend not to lean toward felonious behavior. For this reason, scandals would have more of an impact. Voters are more likely to focus on these behavioral aberrations and punish the wrongdoer via the ballot.

One possible explanation for the finding is that some controversies may be viewed by the public as worse than some scandals. For instance, a public display of drunkenness is deemed as more reprehensible than a violation of campaign finance law. Marital infidelity may be less acceptable than the casual use of marijuana. Maybe incumbents faced with a scandal are more diligent in their campaigning and more liberal with the use of campaign funds, thus counter-acting any potential negative effects. Since they think that a scandal can seriously threaten their incumbency, they are prepared to deal with it in advance of the campaign. Controversies are not considered as threatening, so incumbents are not as vigilant. This lack of vigilance translates into lost votes. In any event, the scandal variable is insignificant. Further scholarly exploration of campaigns involving candidate misconduct will hopefully shed more light on this interesting topic.

The interaction term between state unemployment level and the incumbent's status in the governing party is one of the strongest variables in the model. This is clear proof that economic factors do influence the outcome of elections. Many studies have found that presidents are held accountable for the state of the economy (Erikson, 1989; Hibbs Jr., 1987) and my findings suggest that senators, too, are held accountable if their party affiliation matches that of the president. This type of collective accountability should provide ample motivation for presidents and senators to bridge any institutional gaps in an effort to attain party solidarity. In a sense, they all sink or swim together. This situation is an example of the continuing importance of parties.

This importance is additionally manifested in Table 6.4 by the performance of the partisan identification variable. When an incumbent runs in a state that has a high number of citizens identifying with his or her party, then he or she will perform better at the polls. This holds true for Democrats and Republicans. Obviously, it is easier to win an election when the electorate is predisposed to vote for you. Incumbents running in states with a fairly even distribution of party identifiers or with a higher number of opposing identifiers have a tougher trek, since they do not have the luxury of preaching to the choir.

Finally, the variable measuring an incumbent's ideological distance from the electorate is insignificant. In this equation, however, it is in the right direction. Taken together, these variables perform relatively well. I would like a higher R-squared, but further refinement of the model should strengthen its explanatory power.

The overall strength of the model is only one consideration in this study. The key question that I seek to answer is whether a challenger's level of political quality determines the effectiveness of his or her spending. Do high-quality challengers receive lower marginal benefits from their expenditures? The very strong performance of the two spending variables in my model should allow me to answer this question with a fair degree of accuracy. It is to this task that I now turn.

Partitioned Samples

When seeking to demonstrate that a particular variable creates variation in the performance of another variable, researchers will often utilize an interaction term. Specifically, they code the variable that is hypothesized to cause the effect as a dummy variable, and then multiply it with the variable that is supposed to be affected. In this study, CPQ would be transformed into a variable coded one for high-quality challengers and zero for those that are not. Candidate spending would then be multiplied by this variable. This method is employed when the researcher thinks that *only one* variable in

the overall model is affected. None of the remaining variables should be directly affected by the dummy variable.

The use of an interaction term is not suitable for this study. Instead, I choose to divide the entire sample into two groups based on the political quality of challengers. Rather than using CPQ to create a dummy variable, I use it to guide my division of the sample. One group contains only high-quality challengers, and the other group contains only low-quality challengers (minor office and no elective office). This method of analysis is appropriate when the researcher thinks that *all* of the variables in the model are affected. That is the case here.

I think that CPQ alters the dynamics of an entire campaign, of which candidate spending is one element, albeit an important one. Senate contests are waged over an entire state, and therefore require a lot of diligence in order to be successful. It is not enough for a candidate to run an ad on two or three television stations in order to reach likely voters. This might work in smaller House districts, but the geography of a Senate race dictates that candidates disburse their messages through various media outlets and across vast populations.

It is also not enough for a candidate to stand in front of a local grocery store or shopping mall and greet voters as they arrive. Instead, the candidate must be willing to devote an inordinate amount of time traveling across the state and focusing on often distinct groups of voters. Obviously, this combination of retail and personal politics requires an efficient organization and substantial campaign funds. Entrenched incumbents have both of these, but what about challengers?

This is where the distinction between high-quality and low-quality challengers is clearest. High-quality challengers have experience running successful campaigns; sometimes even statewide campaigns. This means that they begin the Senate race with a relatively high amount of recognition among voters. Low-quality challengers do not

have this kind of experience. While they may have met with past electoral success, winning a seat on the local school board or in the state House hardly prepares one for mounting a challenge for a U.S. Senate seat. Those challengers with no previous electoral experience face an even bleaker scenario.

What does this mean in terms of challenger expenditures? Results from past research point out that the primary function of campaign expenditures is to communicate with the electorate. An effective utilization of funds will result in a greater awareness of the candidate by the public. Such spending will be most beneficial to those candidates who are not well-known by the public.

For example, imagine that two candidates each spend \$10,000 to run an ad during a popular prime time program. This program is watched by 100,000 people in the state, and these people also happen to be conscientious citizens who regularly vote. Before the ad airs, Candidate A is already known by 90,000 of these voters and Candidate B by 20,000 of them. No one gets up to go to the refrigerator or to use the bathroom during the commercial, so all 100,000 voters see the ad. Candidate A has just reached 10,000 new voters, or one voter per one dollar spent. Candidate B has just reached 80,000 new voters, or eight voters per one dollar spent.

So, even though each candidate spent the same amount of money on the same thing, one candidate got a higher return on that expenditure. And the explanation for that higher return is that the candidate was not as well-known to the public as his or her opponent. Like Candidate A in the above example, incumbents tend to be well-known among voters. This means that the extent of the spending differential in a campaign will be determined by the challenger. Since high-quality challengers are also fairly well-known, the marginal benefits that they receive from spending will be similar to those received by incumbents. Since low-quality challengers are not as well-known, the

marginal benefits that they receive from spending will be much greater than those received by incumbents.

My major contention is that the difference in the benefits received from campaign expenditures will be greater in elections involving low-quality challengers than in elections involving high-quality challengers. However, there is more to the story. It is simply illogical to think that the ever-fluctuating atmosphere of a campaign will remain unaltered, except for spending, when a prominent challenger enters that atmosphere. High-quality challengers are in a position to take advantage of other elements in a campaign that low-quality challengers are not.

For instance, high-quality challengers should be better able to capitalize on incumbent controversies and scandals. High-quality challengers are usually relatively well-funded and have experience waging victorious campaigns. This means that they are prepared to take advantage of any mistakes made by their opponents. Becoming embroiled in a personal imbroglio is the type of mistake that incumbents try to avoid like the plague. Should an incumbent become involved in a controversy or scandal, however, then high-quality challengers are more likely to make them pay.

High-quality challengers should also be better able to capitalize on poor economic conditions in order to achieve victory. If a state is suffering through economic malaise, then much of the blame is placed at the feet of those incumbents perceived to be responsible for directing economic policy. Governors are the most obvious targets, but senators, particularly those in the president's party, may also become focal points for the electorate's wrath.⁵ Challengers skilled in the art of campaigning can leverage this negative perception toward incumbents to their own benefit. Challengers without much electoral experience or skill are not likely to be as opportunistic.

In addition, high-quality challengers may be better able to sway voters without strong partisan affiliations. These independents tend to rely on other cues in deciding how to cast a vote. Many of these cues are candidate-centered, such as political advertisements and personality-driven interviews. Since high-quality challengers are relatively prominent, then they can make good use of these cues. Furthermore, high-quality challengers have a better chance of blunting the impact of party identification among party identifiers. Party identification is a strong factor in any election, but in elections where both candidates are well-known to voters, it may play less of a role.

So, it is not that challenger political quality interacts only with spending in an interesting way, but that it affects all of the variables in my model. The most efficient way of capturing this is to separate the two types of campaigns--those with high-quality challengers and those with low-quality challengers--and run equations for both. This allows me to gauge the effect of spending in these two different electoral environments.

High-Quality Challengers In Table 6.5, I display the results of my analysis for elections involving high-quality challengers. The coefficient for challenger spending is significant. As stated many times throughout my work, challengers rely heavily on campaign funds to present themselves to the public. Even if a challenger has superlative qualifications, a steady flow of cash serves to enhance the benefits that those qualifications are already providing. It is rare that a challenger can achieve victory absent formidable amounts of spending. It is a safe assumption that without money, challengers--even high-quality challengers--do not stand much of a chance. But if they do acquire campaign funds, they are virtually guaranteed benefits from these funds. The level of significance for challenger spending in every equation in this dissertation serves to reinforce this contention.

The most important aspect of this equation is how challenger and incumbent spending compare to each other. For while challenger spending is significant,

Table 6.5 2SLS Regression of the Effects of Campaign Spending--Senate Campaigns with High-Quality Challengers

Dependent Variable: Incumbent Share of the Two-Party Vote			
Independent Variables	b	B	T
Incumbent Spending	3.423	.407	1.30*
Challenger Spending	-2.693	-.408	-1.71**
Celebrity	-8.075	-.121	-1.47*
Controversy	-4.539	-.213	-2.54***
Scandal	-5.477	-.140	-1.67**
Health	-5.529	-.082	-1.07
Unemployment	.834	.285	3.24***
Unemploy*Party	-.948	-.490	-4.35***
Party I.D.	.172	.295	3.19***
Ideological Distance	-.115	-.071	-.70
Party	-3.738	-.271	-2.21**
R-Squared=.52			
N=92			

Note: *<.10 **<.05 ***<.01

incumbent spending occupies an equally important place in the equation. The beta for the former is -.408, while the beta for the latter is .407; almost perfect parity in this regard. This is a markedly different relationship than the one seen in the other

equations for the Senate. In the other equations, both variables are significant, but challenger spending is always the stronger performer.

The whole reason for bifurcating the data set is to get at this very relationship, and the relationship conforms to expectations. By isolating this subset of elections, one can get a clearer view of what occurs when an incumbent encounters an experienced, skilled, and well-financed opponent. What occurs is that both candidates get locked into a sort of spending stalemate. The primary factor that normally allows challengers to have a spending advantage is of little consequence in these elections.

Specifically, high-quality challengers are denied the huge gains that their low-quality counterparts receive from expenditures on communications, because they start out with a fairly high amount of recognition among the public. Thus, while they still get positive benefits from their expenditures, they also reach the point of diminishing returns much sooner. This brings the benefits that they receive from spending into line with the benefits that incumbents receive. Incumbents are used to receiving little from the dollars that they spend, the difference in these elections is that their high-quality challengers are now in the same boat.

What are the consequences of this for the final election result? One might think that challengers who are denied the advantage derived from differential spending effects have two chances: slim and none, with slim having just left town. In fact, just the opposite is true. The reason that they are not getting huge returns on every campaign dollar spent is because they have advantages that most challengers do not enjoy. While these advantages may not be as numerous as those that accrue to incumbents, they are sufficient to wage an effective campaign.

Given the choice of having previously held an important elective office and being known by the electorate versus being inexperienced and obscure, only those

challengers prone to tilting at windmills would choose the latter. High-quality challengers may not get the benefits from spending that other challengers get, but this is offset by the fact that their experience and visibility place them on a fairly level playing field with incumbents. This is not to say that incumbents are underdogs, because even in the more competitive arena of Senate elections, incumbents win a majority of the time, but it is to say that high-quality challengers have a better chance of winning than low-quality challengers. Deriving higher marginal returns from campaign spending does not do one any good when you do not have much to spend in the first place, which is the position that most low-quality challengers find themselves in.

The remaining results basically conform to expectations. High-quality challengers take advantage of incumbent controversies and scandals, as well as taking advantage of incumbents who are in the governing party during poor economic times. They are not able to overcome the influence of party identification on the electorate. Incumbents from states with populations that mirror their own partisanship are in a more favorable position than incumbents who must run against the tide of partisanship. This partisan loyalty is especially important to an incumbent in a competitive election.

Low-Quality Challengers In Table 6.6, I display the results of my analysis for elections involving low-quality challengers. The coefficient for challenger spending is significant. Though low-quality challengers often have difficulty acquiring campaign funds, whatever funds they can acquire are very beneficial in helping them to achieve a higher vote total. This points out the Catch-22 that low-quality challengers face in congressional elections. They are unable to raise large sums of money because of a dismal level of recognition among contributors, but the surest way of increasing that recognition is to raise—and spend—large sums of money. The problem is not the efficiency with which funds are expended, but rather the inability to acquire those funds in the first place.

Table 6.6 2SLS Regression of the Effects of Campaign Spending--Senate Campaigns with Low-Quality Challengers

Dependent Variable: Incumbent Share of the Two-Party Vote			
Independent Variables	b	B	T
Incumbent Spending	5.115	.581	3.09***
Challenger Spending	-5.495	-.845	-6.56***
Celebrity	-5.762	-.141	-1.99**
Controversy	-1.776	-.054	-.83
Scandal	-2.343	-.041	-.60
Health	-5.610	-.098	-1.45*
Unemployment	.049	.010	.14
Unemploy*Party	-.449	-.168	-2.24**
Party I.D.	.071	.097	1.20
Ideological Distance	.032	.016	.22
Party	.622	.035	.37
R-Squared=.44			
N=168			

Note: *<.10 **<.05 ***<.01

In this equation, as opposed to the one for high-quality challengers, the coefficient for incumbent spending is significant at the more stringent .01 level. However, incumbent spending does not come close to achieving parity with challenger

spending. The beta for challenger spending (-.845) is larger than that for incumbent spending (.581). Once again, the relationship between the spending variables is as predicted. In elections with low-quality challengers, the difference in the coefficients should be greater than in elections with high-quality challengers.

Low-quality challengers do not enjoy the advantages that were described in the previous section, which means that they have a huge amount of ground to cover in order to generate recognition among the public. They rely heavily on campaign funds in order to accomplish this goal. Since each dollar spent translates into increased familiarity among voters, the marginal returns are quite high. Incumbents capitalize to the extent that they can from expenditures, but as with the other group of elections, the relationship between the spending variables really depends on the characteristics of the challengers. The lack of recognition for low-quality challengers and the abundance of recognition for incumbents manifests itself through a greater disparity between the two spending coefficients.

Among the other variables in the equation, only challenger celebrity status, the incumbent's health, and the interaction term between unemployment and the incumbent's membership in the governing party are significant. Low-quality challengers are unable to capitalize on incumbent controversies or scandals that arise during the course of a campaign. Oddly, the partisan demographics of a state are insignificant in these elections. Why would state party identification be significant in elections with high-quality challengers, but insignificant in elections with low-quality challengers?

As mentioned earlier, logic would lead one to believe that if anyone could dampen the effects of partisanship, it would be high-quality challengers. Perhaps an explanation lies in emphasizing the role of incumbents as opposed to challengers. In

contests where incumbents are met with virtually no competition, they dominate the political landscape. Through a phenomenal advantage in spending and highly skewed coverage by the press, powerful incumbents are able to promulgate an electoral black-out against challengers. In such a scenario, incumbents will attract votes from all segments of the electorate, including both parties. These landslide elections make party identification a mute point; voters of both persuasions are casting ballots for the incumbent in large percentages.

In more competitive elections, incumbents are unable to cast aside challengers with such ease. Competitive elections, usually involving high-quality challengers, are contests where both camps have the resources to shore up their political bases. As a consequence, incumbents are unable to draw as much support from voters who identify with the opposite party. Thus, party lines remain intact and party identification emerges as a more important source of the vote. Again, this is merely an initial attempt to explain an interesting question that has been raised by my findings.

CONCLUSION

The main focus of this dissertation is challenger spending, and a comparison of the equations for high-quality and low-quality challengers fully supports my theory of challenger spending as it relates to the vote. High-quality challengers, because of their level of recognition among voters vis-a-vis incumbents, should receive less benefits from spending than low-quality challengers. Looking at high-quality challengers (Table 6.5), the standardized coefficient for challenger spending is virtually equal to that of incumbent spending, and challenger spending reaches significance at the .05 level. Looking at low-quality challengers (Table 6.6), the standardized coefficient for challenger spending is far stronger than that of incumbent spending, and challenger spending easily reaches significance at the .001 level.

It is clear that for Senate elections, expenditures by low-quality challengers have far more vigor than expenditures by high-quality challengers. Because of their lack of visibility among voters, low-quality challengers should especially benefit from expenditures, and my results show that they do. The question now becomes whether this holds true for House elections as well. It is to this question that I now turn.

END NOTES

- 1) Obviously, party is included in the model as a control variable, but it is not relevant to my analysis.**
- 2) Divided government can make retribution more difficult. If one party controls Congress and the other controls the White House, voters may be ambivalent in assessing blame.**
- 3) Some incumbents fall victim to strong partisan tides. A competent senator can lose if the national mood is against his or her party. So, as a challenger, that person might have a good chance at regaining office, especially if the tide has shifted. These partisan tides are accounted for in my model by the party variable.**
- 4) Many U.S. Representatives have also spent time in state legislators. This adds to their pedigree as qualified legislators.**
- 5) For instance, senators have access to federal largesse that can alleviate economic woes. Also, they have considerable individual power to add measures to economic legislation that will benefit their states.**

CHAPTER SEVEN: REGRESSION ANALYSIS OF HOUSE RESULTS

The previous chapter detailed evidence to support the main theory guiding this research project. The evidence suggests that low-quality challengers receive greater benefits from campaign spending than high-quality challengers. Since a candidate's quality is a reliable proxy for a candidate's level of recognition among voters, then the conclusion reached is that candidate visibility does, in fact, impact the benefits that challengers receive from spending. These findings are within the context of campaigns for the Senate. I now turn my attention to campaigns for the House.

It is well documented that the institutional rules and norms for both chambers are, in some important aspects, different from one another (Asher, 1973; Fenno, 1982; Rieselbach, 1979). Likewise, the electoral environment within which campaigns occur are different for the two chambers. House races occur more frequently; they tend to be centered around more parochial issues; television advertising is not as necessary for reaching large segments of the constituency; they attract a higher percentage of challengers with no previous experience in elective office; incumbents win reelection at higher rates. One wonders whether the impact of candidate expenditures is another difference between campaigns for the two chambers.

One of the paramount contentions of this dissertation is that my theory of campaign spending is equally applicable to both the House and the Senate. The vast majority of the literature in this area has looked at one chamber--usually the House--to the exclusion of the other. Rarely have both chambers been examined at the same time. This creates uncertainty as to whether results for one chamber are generalizable to the other. Establishing a theory that encapsulates both chambers would advance the literature, with the primary benefit being a more unified understanding of congressional

elections. Thus, it is important that my results for the House mirror my results for the Senate in terms of challenger spending benefits.

OLS RESULTS

In Tables 7.1 and 7.2, I present two OLS equations for the House. Table 7.1 contains the most basic, with incumbent and challenger spending as the only independent variables. The coefficient for challenger spending is extremely significant (check out that t-value), while the coefficient for incumbent spending is insignificant. My data set is much larger than that of the early studies using OLS to estimate House elections, but the basic finding remains the same. This finding is what sparked the academic debate because of its counter-intuitive logic. It does not seem logical that incumbents would receive no benefits from expenditures.

Table 7.1 OLS Regression of the Effects of Campaign Spending--House

Dependent Variable: Incumbent Share of the Two-Party Vote			
Independent Variables	b	B	T
Incumbent Spending	.164	.013	.92
Challenger Spending	-5.170	-.692	-46.94***
Party	1.132	.056	4.39***
R-Squared=.48			
N=3181			
Note: *<.10 **<.05 ***<.01			

In Table 7.2, I present the results for the full model. With the additional variables thrown into the mix, the finding of insignificance for incumbent expenditures

Table 7.2 OLS Regression of the Effects of Campaign Spending--House

Dependent Variable: Incumbent Share of the Two-Party Vote			
Independent Variables	b	B	T
Incumbent Spending	.312	.025	1.80**
Challenger Spending	-4.739	-.634	-41.98***
Governor	10.739	.027	2.19**
Senator	5.436	.009	.78
U.S. Rep	-2.518	-.029	-2.36***
Major	-1.126	-.025	-2.00**
Minor	-1.800	-.063	-4.94***
Celebrity	-1.733	-.022	-1.79**
Controversy	-4.839	-.078	-6.28***
Scandal	-8.513	-.081	-6.56***
Health	-3.365	-.017	-1.37*
Party I.D.	.117	.145	10.92***
Ideological Distance	.062	.015	1.44*
Party	.177	.008	.67
R-Squared=.51			
N=3181			
Note: *<.10 **<.05 ***<.01			

disappears. Incumbent spending is significant at the .05 level, but it does not bring the same weight to the model as challenger spending, which is significant at the .001 level. A look at the standardized coefficients for the two variables offers dramatic proof that challengers receive greater benefits from spending. The beta for challenger spending (-.634) is ten times that of incumbent spending (.025).

It is interesting to compare these results with those from the full OLS equation for Senate elections. In that equation, the difference between the spending coefficients was not nearly as big as it is here. The challenger spending coefficient was double that of incumbent spending. This finding is in line with what my theory would lead one to expect. Because challengers in House campaigns are not as well-known as challengers in Senate campaigns vis-a-vis incumbents, the difference in spending effects between incumbents and challengers should be far greater in House elections.

Overall, the model performs fairly well, with all but the senator coefficient achieving significance. It is a bit odd that the beta for challengers with minor electoral experience (-.063) is larger than those for the other CPQ variables. It is also worth noting that the beta for incumbent controversy (-.078) is similar to the beta for incumbent scandal (-.081). Apart from challenger spending, the largest coefficient is for partisan identification (.145). This makes sense when one considers all of the electorally safe districts that exist throughout America. An incumbent who serves a district that is heavily populated with fellow partisans is likely to win landslide victories election after election. As the incumbent becomes increasingly entrenched, the advantages derived from incumbency and party become virtually insurmountable.

2SLS RESULTS

As mentioned in the previous chapter, OLS estimates of campaign spending equations may be skewed, and so it is necessary to turn to other statistical techniques. Table 7.3 contains the results for the basic 2SLS equation. Both of the coefficients are

Table 7.3 2SLS Regression of the Effects of Campaign Spending--House

Dependent Variable: Incumbent Share of the Two-Party Vote			
Independent Variables	b	B	T
Incumbent Spending	2.018	.16	3.30***
Challenger Spending	-4.507	-.603	-21.48***
Party	.953	.047	3.55***
R-Squared=.47			
N=3181			
Note: *<.10 **<.05 ***<.01			

significant at the .01 level. Of the two variables, challenger spending performs best. Though incumbent spending does not perform as well as challenger spending, it is highly significant. This is in contrast to the OLS model discussed above, which found incumbent spending to be insignificant. Since the data set used for each equation is exactly the same, this reversal can only be the result of the different statistical techniques employed.

Because it is not equipped to handle endogenous variables, OLS produces biased estimates. Green and Krasno (1988: 886) note,

If incumbents raise money as they become threatened by the prospect of defeat, the apparent effect of incumbent expenditures will be biased [negatively], and the role of incumbent spending will be understated. Conversely, if challengers attract campaign contributions as their prospects for victory improve, the estimates for challenger expenditures will be biased positively, and the effect of challenger spending will be overstated.

Through the creation of instrumental variables, 2SLS eliminates, or at least dramatically reduces, this problem. As a result, the bias which caused the coefficient for incumbent expenditures to be underestimated to the point of insignificance in the OLS model is jettisoned, and the true relationship of incumbent spending to challenger spending is realized. Likewise, 2SLS lends itself to a more accurate assessment of the other variables in the model.

In Table 7.4, I present the regression results for the full model. Again, both of the spending coefficients are significant, with challenger spending (-.546) having a higher value than incumbent spending (.164). Upon examining all of the equations in this chapter, a definite pattern can be detected in elections for the House. Challengers get a far bigger bang for their buck than do incumbents. In Senate elections, challengers also derive higher marginal returns on expenditures, but not to the extent that they do in House elections.

The simple fact is that the average challenger for the House is not as qualified or as recognizable as the average challenger for the Senate. This creates a huge disparity between incumbents and challengers in terms of public awareness. Many challengers enter House races as virtual unknowns, and this situation is only reinforced by a lack of media attention. Unless challengers can generate a certain degree of momentum on their own, local media outlets are unlikely to devote much time to covering their campaigns. This is in stark contrast to the inundation of information that districts receive from incumbents via such channels as television and radio advertising, telephone solicitations, and direct mailings.

Therefore, the coefficients of the spending variables in this equation should come as no surprise. If campaign expenditures are mainly employed to communicate a candidate's message to the electorate and many voters are already aware of the incumbent's message, then the incumbent will not benefit as much from these

Table 7.4 2SLS Regression of the Effects of Campaign Spending--House

Dependent Variable: Incumbent Share of the Two-Party Vote			
Independent Variables	b	B	T
Incumbent Spending	1.981	.164	3.32***
Challenger Spending	-4.077	-.546	-20.28***
Governor	10.804	.027	2.14**
Senator	6.187	.011	.87
U.S. Rep	-2.047	-.024	-1.86**
Major	-.947	-.021	-1.63*
Minor	-1.667	-.059	-4.43***
Celebrity	-1.604	-.020	-1.61*
Controversy	-4.320	-.070	-5.38***
Scandal	-9.012	-.086	-6.73***
Health	-3.816	-.019	-1.51*
Party I.D.	.110	.136	9.90***
Ideological Distance	.006	.009	.85
Party	.053	.002	.19
R-Squared=.55			
N=3181			

Note: *<.10 **<.05 ***<.01

expenditures. Conversely, the challenger is often in dire need of connecting with voters and will reap huge returns on any investment made in this area. So while challengers of all stripes benefit from spending, the context within which challengers operate in House elections increases these benefits.

Of the five variables measuring a challenger's previous office, only the one for the office of senator has a coefficient that fails to rise to a level of significance. This finding is not surprising. The office of senator is more prestigious than that of representative, so that a former senator running for the House is perceived as taking a step down on the political ladder. Candidates in this situation are likely to be on the downslope of their careers or trying to restore a tarnished image. In any event, this is a situation where the office of senator does not yield the usual benefits.

In this equation, the coefficient for holding a minor elective office is once again stronger than the other political quality coefficients. This result is not a product of skewed OLS estimates. Why would these challengers meet with more success than those with experience in more prestigious offices? The explanation for the offices of governor and U.S. Representative is much the same as that for senator.

Because a run for the House is seen as a step down for someone who has been governor of a state, these candidates may receive as much skepticism as support from the electorate. Those challengers in the U.S. Representative category are politicians who were defeated for reelection and are trying to reclaim a seat on Capitol Hill.¹ It stands to reason that if the voters in a district reject a candidate one time, they are going to be more apt to do it again should that candidate return. There are instances where an incumbent loses a very close election and emerges victorious two years later, but generally a defeat carries the stamp of finality.

An explanation for the relationship between major and minor challengers is not as obvious. It would seem that challengers in the major category should fare better than

those in the minor category. A possible reason for this result could lie with how I code state legislators. For House races, I place state senators in the major category and state representatives in the minor category. I felt this was warranted because of the congruousness of state Senate districts and U.S. House districts. But in fact, state senators may not have any particular edge over state representatives when it comes to running for this higher office.

A challenger's celebrity status plays just as well at the district level as at the state level. The rate of reelection to the House is extremely high, but one factor that can threaten reelection is damage wrought by a controversy or scandal; both of these coefficients are significant. The more accurate estimates produced by 2SLS confirm the predicted relationship between these two variables. The beta for incumbent scandal (-.086) is bigger than the beta for incumbent controversy (-.070). The repercussions from scandals, which involve accusations of violations of law, should be more severe than those from controversies. The equation also points to negative repercussions for incumbents who suffer from poor health.

After the two spending variables, district partisanship performs strongest in the model. Districts tend to be more homogenous than states in terms of partisanship, so that a candidate with strong party ties should remain electorally safe. Districts tend to be more homogenous in other respects as well, which explains why members of the House who are especially talented at taking the pulse of their constituents can call that chamber home for decades on end.

High-Quality Challengers

As in the previous chapter, elections are divided into two categories: those with high-quality challengers and those with low-quality challengers. This allows me to accurately gauge the effect that challenger quality has on the effects of spending. As discussed earlier, House campaigns rarely attract the level of challengers that Senate

Table 7.5 2SLS Regression of the Effects of Campaign Spending--House Campaigns with High-Quality Challengers

Dependent Variable: Incumbent Share of the Two-Party Vote			
Independent Variables	b	B	T
Incumbent Spending	2.983	.251	.84
Challenger Spending	-6.030	-.689	-3.73***
Celebrity	.058	.001	.01
Controversy	-2.979	-.097	-1.44*
Scandal	-1.501	-3.374	-.44
Party I.D.	.116	.112	1.86**
Ideological Distance	.157	.085	1.40*
Party	2.030	.127	2.18**
R-Squared=.53			
N=218			

Note: The variable for health is excluded due to a lack of variance.*<.10 **<.05
***<.01

campaigns do. So even high-quality challengers in House races are unlikely to enjoy the kind of recognition exhibited by elite challengers for the Senate. Therefore, high-quality challengers should receive greater benefits from spending than incumbents, just not as great as their low-quality counterparts. In Table 7.5, I present the results.

A look at the coefficients for the two spending variables reveals the one truly unexpected result from this entire dissertation. Incumbent spending is insignificant in

this equation. While this finding does not negate my overall theory, it does represent the one major assumption that fails to fall into place as anticipated. I expected for there to be a difference in the coefficients between these two variables, and that expectation is confirmed. But I also expected that difference to be relatively small; instead, one of the coefficients fails to play much of a role in the equation at all.

If incumbent spending was going to be found insignificant, one would assume that it would occur in the House model for low-quality challengers, but the next section demonstrates that this is not the case. Even that result would have been mildly surprising, since it is counter-intuitive to think that any candidate would not derive some benefit from spending, no matter how paltry. Jacobson's (1978) finding of insignificance was deemed to be a product of the use of OLS, and subsequent studies (Kenny and McBurnett, 1994; Goidel and Gross, 1994) have corrected that problem through the use of other statistical techniques.

However, no previous study has sought to explicitly examine the role that a challenger's political quality has on spending by partitioning elections involving high-quality and low-quality challengers. This is the first study to treat elections with high-quality challengers as an entirely distinct sample. What is it about these races that causes incumbent spending to be ineffective? Clearly, this is an area that is ripe for further research.

The iron-clad finding that challengers greatly benefit from expenditures holds true. The electoral fortresses that House incumbents construct are, perhaps, only capable of being penetrated by large sums of money. Even if challengers enter a campaign with previous experience winning elections, the daunting task of defeating a congressional incumbent requires a certain reliance on effective spending. The good news for high-quality challengers is that incumbent spending in these campaigns

appears to be impotent. Incumbents cannot rely solely on spending to overwhelm their opponents. However, incumbents do have a variety of other advantages that they can draw on, so that spending inefficiency can be overcome and reelection achieved.

Of the five remaining variables, three of the coefficients are significant. The fact that the coefficient for incumbent scandal is not significant is unexpected. One would expect skilled challengers to be positioned to take advantage of indiscretions committed by incumbents, but this is not the case. Perhaps House incumbents are so entrenched that even personal errors can be overcome; a situation that does not exist for their less secure counterparts in the upper chamber.

Incumbents also appear to be impervious to the threat posed by celebrity. Being a celebrity does not significantly increase the vote total for challengers. As with the other regressions in this dissertation, the variable measuring an incumbent's ideological distance from his or her constituency exerts little influence on the final outcome of an election. Though ideology does not come into play, party identification does. The strength of party affiliation as a determinant of the vote continues to be a thread that runs throughout all of the models in this dissertation. Clearly, reports of the party system's demise are greatly exaggerated.²

Low-Quality Challengers

In Table 7.6, I offer findings for House elections with low-quality challengers. Both challenger and incumbent spending are significant at the .001 level. Challenger spending (-.571) provides greater benefits than incumbent spending (.155), and is by far the strongest standardized coefficient in the model. The fact that low-quality challengers have very little going for them, in terms of electoral firepower, means that every dollar spent yields large gains. The downside is that they usually raise a pittance of what incumbents raise, which counteracts the marginal advantage that they have. All

Table 7.6 2SLS Regression of the Effects of Campaign Spending--House Campaigns with Low-Quality Challengers

Dependent Variable: Incumbent Share of the Two-Party Vote			
Independent Variables	b	B	T
Incumbent Spending	1.841	.155	3.36***
Challenger Spending	-4.154	-.571	-22.24***
Celebrity	-1.704	-.022	-1.75**
Controversy	-5.019	-.080	-6.05***
Scandal	-10.509	-.099	-7.62***
Health	-4.287	-.023	-1.80**
Party I.D.	.109	.143	10.09***
Ideological Distance	.013	.016	1.62*
Party	-.216	-.011	-.80
R-Squared=.51			
N=2939			
Note: *<.10 **<.05 ***<.01			

other things being equal, challengers who match incumbents in spending should prevail in the election. But all other things are not equal, and the obstacles faced by challengers are often too vast to overcome.

The two spending variables perform as the assumptions expressed in this dissertation would lead one to expect. The lack of awareness on the part of the electorate for low-quality challengers, coupled with the scarcity of comprehensive

media coverage, creates an electoral environment in which challengers have virtually nothing else to rely on other than the amount of funds that they manage to scrape together. Expenditures aimed at communicating with potential voters are the only reliable option that low-quality challengers have in their quest to capture the public's imagination. They cannot rest on past laurels, current journalistic curiosity, or future favorable events. Their best bet is to spend whatever funds they have, and hope that this helps them gain a foothold in the campaign. This set of circumstances inevitably leads to a large discrepancy in the benefits that low-quality challengers and incumbents receive from expenditures.

All of the other coefficients in the equation are also significant. Once again, the weakest performer is the coefficient for an incumbent's ideological distance from the electorate. This variable performs poorly in each of the equations in this study. The variable is constructed by calculating the ideological disposition of incumbents through their roll-call votes in Congress and comparing these to a measure of their constituents' ideology. The fact that this variable performs poorly may point out the electorate's disinterest in how votes are cast in Washington D.C. An incumbent's party label and personal attributes may simply outweigh any perceived ideological drift in the minds of voters. Certainly a radical shift in an incumbent's ideological tenor could spell trouble, but most incumbents work hard to avoid this perception.

The significance of the celebrity coefficient is yet another indicator of the public's fascination with celebrities. In the realm of politics, logic would dictate that past political experience and a proven track-record are the most important qualifications for office. Whether or not someone appeared on a television show or met with success on an athletic field of play should be irrelevant. Throughout this study, the strong performance of the celebrity variable shows just the opposite.

Even a challenger with virtually no experience can generate a certain degree of heat by virtue of accomplishments outside the realm of politics. And of course, we all know this to be true. The exciting thing about politics is that it exists free from the strict dictates of logic. Sometimes things happen that do not seem to make any sense, especially in the raucous environment of campaigns. Campaigns are about people, and people always have been and always will be drawn to the famous, albeit in varying degrees.

The coefficients for controversy and scandal are also highly significant. Incumbents facing low-quality challengers understand that they have a virtual lock on victory. The staggeringly high reelection rates to the House over the past few decades are proof of this. With this in mind, the one thing that incumbents should avoid at all costs is becoming embroiled in a messy controversy or ugly scandal. These things certainly tarnish an incumbent's image, and can possibly cause defeat. Alas, how many times have we watched in disbelief as an incumbent pulls out a metaphorical gun and shoots himself or herself in the foot? And while such events produce a collective shudder from the other 534 members of Congress, they are seen as a sign of hope to all those struggling challengers. Victory, sweet victory, can be delivered in the strangest of packages.

The variable for an incumbent's health has performed relatively well throughout this study. Politics can often be a harsh business and this is an example of that. It has long been known that a suspect medical history is a barrier to candidates seeking to capture the White House. Apparently, poor health is also an impediment to reelection to Congress. Whether voters are wary of sending someone to Washington D.C. who may be unable to perform the requisite duties or whether these incumbents cede ground to their opponents because of an inability to campaign vigorously, incumbents with health concerns travel a tougher road than they otherwise would.

Finally, a few more words about party identification. The coefficients for this variable have performed strongly in equations for both chambers. As politicians become increasingly comfortable using the communication tools offered by the information age, it is easy to assume that the trend toward personalized campaigns will accelerate. However, this assumption underestimates the important function that parties continue to have in our political system. An individual candidate's operation, even in a small House district, pales next to the political infrastructure that is maintained by the two major parties. No one disputes that charismatic politicians are often able to build loyal coalitions, but the results in these pages demonstrate that the banner under which they run remains influential.

CONCLUSION

With one exception, the results in this chapter basically conform to my overall theory. In House races, virtually every challenger is going to enter the race operating under a deficit in terms of recognition from the public. For high-quality challengers, that deficit should be smaller than for low-quality challengers. For this reason, the difference in the coefficients between incumbent and challenger spending should be smaller in contests with high-quality challengers than with low-quality challengers.

The equation for elections with high-quality challengers (Table 7.5) produces the only deviation from my overall expectations. In this equation, incumbent spending is insignificant. Rather than having fairly similar coefficients, challenger spending is considerably stronger. In fact, the difference between the betas from this equation and the equation for low-quality challengers (Table 7.6) is approximately the same. This indicates that both types of challengers benefit equally well from expenditures.

This finding serves as an interesting sidenote. As we know from Jacobson's (1978) article, such counter-intuitive results often spark as much attention as the main

conclusion. It is an issue that bears further analysis, but as I explain in the next chapter, it does not particularly call into question my theory. It is to this final chapter that I now turn.

END NOTES

- 1) There are instances where two incumbent U.S. Representatives square-off in an election due to redistricting. However, these elections are excluded from my analysis.**
- 2) My regards to Mark Twain.**

CHAPTER EIGHT: A LOOK BACK AND A LOOK FORWARD

In this chapter, I summarize the key findings from this dissertation, as well as discuss some areas for future research. As with any lengthy study, there is a voluminous amount of information contained in the preceding chapters. All of that information is here because I deem it relevant to the topic under consideration. But to paraphrase George Orwell, some pieces of information are more relevant than others. There are numerous instances where my research produced interesting and even surprising results. These instances are discussed in the text in the hope that they might spark additional avenues of inquiry. However, they do not directly relate to the central issue around which this entire enterprise revolves.

Ultimately, this dissertation is concerned with the campaign expenditures of congressional candidates, and how the benefits derived from those expenditures are affected by the electorate's recognition of the candidates. This is a topic that, though relatively new on the political science scene, has garnered quite a bit of attention. It attracts scholars because of its complex methodological issues and its possible impact on campaign finance reform. In undertaking this project, I hope to add to the existing literature by exploring areas that have been ignored and providing new evidence to support a traditional theory.

One of the main contributions of this work is the sheer amount of data that has been collected and analyzed. Previous studies have focused on elections for either the House or the Senate, and those focusing on the House have covered a small number of years. For the first time, this study provides a comprehensive examination of both chambers over a twenty year period. This comparative approach to the topic bolsters the generalizability of my findings, as well as provides a viable framework that can offer a degree of consistency to future research.

THE THEORY

In his original 1978 article examining House elections, Gary Jacobson discovers that challengers receive greater benefits than incumbents from campaign expenditures. He reasons that this result centers around the communication aspects of congressional campaigns. Most of the spending that occurs in a campaign is intended, in one way or another, to acquaint the public with the candidate. For the most part, challengers are not as well-known as incumbents by the public. Therefore, any dollar that a challenger spends on communicating with the public is going to yield more than a dollar spent by an incumbent, simply because the challenger has more to gain in terms of public visibility.

Subsequent studies have yielded varying results, but all of these results confirm Jacobson's key conclusion: challengers get a bigger bang for the buck. The one exception is an article by Alan Gerber (1998) that examines the role of spending in Senate elections. He finds that incumbents and challengers equally benefit from spending, and if anything, incumbents actually receive higher marginal returns on spending. Based on this finding, he questions the viability of Jacobson's theory.

The main objective of this dissertation is to demonstrate how these varying results are consistent with Jacobson's theory. The problem is that these two accomplished scholars are not approaching the subject from a broad enough viewpoint. Jacobson fails to make any nuanced distinction between different types of challengers (high-quality and low-quality), while Gerber fails to make any distinction between different types of elections (House elections and Senate elections). This study encompasses all of these critical elements in an attempt to bridge the gap that currently exists in the literature on campaign spending.

The voter recognition theory that serves to guide this dissertation is a logical extension of Jacobson's theory. By elaborating on some critical elements from his

theory, I provide a way of looking at campaign spending that is applicable to all congressional elections at all times. Basically, the theory focuses on the different electoral environments within which House and Senate candidates operate.

The Senate is the more prestigious of the two chambers. Consequently, elections for the Senate tend to be more competitive than elections for the House. A primary determinant of electoral competitiveness is the quality of the challenger. Incumbents have the experience and resources to run effective campaigns, but challengers vary in this regard. High-quality challengers are those that have previous experience in an important elective office, while low-quality challengers lack this experience. Because of this experience, high-quality challengers enjoy a higher level of recognition from the public than low-quality challengers. Thus, Senate elections differ from House elections because they attract high-quality challengers who are well-known by the public.

If the benefits that challengers receive from expenditures are inversely related to the level of recognition that voters have of these challengers, then low-quality challengers should receive greater benefits from spending than high-quality challengers. Since incumbents from both chambers maintain high levels of recognition among the electorate, the difference in spending benefits between incumbents and challengers is determined by the quality of challengers. Low-quality challengers should receive much greater benefits than incumbents, while high-quality challengers should receive benefits that are roughly equal to incumbents. Thus, the difference in spending benefits between incumbents and challengers is smaller in Senate elections than in House elections.

THE EVIDENCE

In order for the voter recognition theory to be valid, three key assumptions must be true. First, the difference between the coefficients for incumbent spending and challenger spending should be larger in elections with low-quality challengers than in

elections with high-quality challengers. In Tables 6.5 and 6.6, I present results for Senate elections. In elections with low-quality challengers, the standardized (beta) coefficient for challenger spending is $-.845$ and for incumbent spending is $.581$. Setting aside the negative sign, which merely proves that the coefficient is in the proper direction, the difference between these coefficients is $.264$. In elections with high-quality challengers, the beta for challenger spending is $-.408$ and for incumbent spending is $.407$; a difference of $.001$. As predicted, the difference in spending benefits is larger in elections with low-quality challengers.

In Tables 7.5 and 7.6, I present results for House elections. In elections with low-quality challengers, the beta for challenger spending is $-.571$ and for incumbent spending is $.155$; a difference of $.416$. In elections with high-quality challengers, the beta for challenger spending is $-.689$ and for incumbent spending is $.251$; a difference of $.438$. It is also worth noting that incumbent spending is not significant in the equation for high-quality challengers. In House elections, the predicted differences do not come to fruition. However, this is not a major blow to the veracity of the theory due to the second key assumption.

The second assumption is that Senate elections will attract more high-quality challengers than House elections. As shown in Tables 5.4 and 5.5, of the 279 challengers in Senate elections, 98 of them were designated as high-quality. Of the 3550 challengers in House elections, 220 of them were designated as high-quality. It now becomes clear why the single exception to my correctly predicted results—House elections with high-quality challengers—is not as crucial as one might think. Only a mere 6% of total House elections fall into this category. In contrast, a respectable 35% of total Senate elections involve high-quality challengers. With the set of deviating elections representing such a minuscule percentage of the overall data set, it does not disrupt the overall legitimacy of the theory.

We now know that Senate elections have more high-quality challengers than House elections, and that high-quality challengers receive smaller marginal returns on expenditures than low-quality challengers. This brings us to the third and final assumption. The difference in spending coefficients for incumbents and challengers in all Senate elections should be smaller than the difference in spending coefficients for incumbents and challengers in all House elections.

In Tables 6.4 and 7.4, I present the relevant results. In Senate elections, the beta for challenger spending is $-.778$ and for incumbent spending is $.546$; a difference of $.232$. In House elections, the beta for challenger spending is $-.546$ and for incumbent spending is $.164$; a difference of $.382$. As predicted, the difference in spending benefits is larger in House elections. And focusing entirely on challengers, we see that the standardized coefficient for challenger spending in House elections is $.232$ points higher than that for challenger spending in Senate elections. For all intents and purposes, all three key assumptions are supported by the evidence.

As the above summary of the evidence demonstrates, challengers do receive greater benefits from spending than incumbents *if* those challengers are not as recognizable to the electorate as incumbents. That important "if" is what my voter recognition theory highlights. Jacobson concludes that all challengers get higher returns on spending, while Gerber concludes that no challengers get higher returns on spending, but the truth lies somewhere in between. The determination of challenger spending benefits is *conditional*, rather than absolute.

Challengers receive these benefits on the condition that they are relatively obscure. Low-quality challengers are relatively obscure and tend to populate House elections, so challengers receive greater benefits in those elections. High-quality challengers are relatively well-known and tend to gravitate toward Senate elections, so challengers receive lesser benefits in those elections. This is how one can arrive at

different results that serve to support the same theory. The theory predicts different results depending on the environment within which congressional elections take place.

FUTURE RESEARCH

There are several areas that are prime candidates for future research. One area centers around the finding of insignificance for the incumbent spending coefficient in that set of House elections involving high-quality challengers. This is the one truly unexpected result in the whole dissertation. Why does incumbent spending play such a minor role in these elections? The initial thing that I would like to test is whether my classification of high-quality and low-quality challengers needs to be refined for House races. Specifically, should state representatives and state senators be placed in the same category?

For Senate races, I place all state legislators into the "minor office" category. These offices do not give candidates the type of statewide exposure that is necessary to wage competitive Senate campaigns. The results in this study appear to support my decision. For House races, I divide state representatives into the "minor office" category and state senators into the "major office" category. The latter decision seemed warranted due to the fact that many state Senate districts are as large, and in a few cases even larger, than U.S. House districts.¹ However, the small geographic size and compact media market of many House districts may allow even state representatives to gain a foothold in these races. An industrious state representative campaigning diligently would have the opportunity to make himself or herself known to voters.

By placing all state legislators into the "major office" category for House elections, I would increase the number of cases in this particular data set, and perhaps generate results that are more in line with expectations. Even if the results remain the same, it is still beneficial to pursue this line of inquiry because of the need to arrive at a universal classification for challengers. As I mention in the literature review, scholars

employ various means for determining challenger political quality. The use of a single classification system would facilitate the comparison of results and enable this research agenda to move forward in a more orderly fashion. A better understanding of where state legislators fit into the mix would help in this endeavor.

Another possible line of future research concerns the methods used for measuring voter recognition of challengers. Like other researchers, I use the challenger political quality variable as a proxy for a challenger's level of visibility. Challengers who have served in prestigious offices are going to be more well-known by the public than challengers who do not have such experience. This is sound logic and the variable works fine as a proxy. But it is a proxy.

If given a choice, every researcher prefers to measure a phenomenon directly, rather than rely on an indirect measurement. Of course, this is not always possible. Researchers operate under temporal and financial constraints that force them to adopt more pragmatic methods. The optimum situation is to conduct research without any constraints. In fact, if you stroll through university hallways, you are prone to hear professors speaking with childlike wonder about the possibilities that arise out of unlimited funding. What would unlimited funding mean for the measurement of voter recognition?

The best measurements that exist for the public's awareness of candidates are derived from political surveys. All across the country, people are asked various questions aimed at determining the extent of their political knowledge. One such question measures the percentage of the public who are able to recall or recognize a challenger's name. This is the most direct way to measure that variable.

The problem is that every two years there are approximately 468 congressional elections, which means that there are approximately 468 different polls that one would

have to collect in each election cycle. This would require the resources to acquire access to the various newspapers and television news broadcasts where these poll results are reported. Even if this is possible, there may be some districts or some years where this survey question was not asked. There may be instances where the timing of the surveys are suspect; occurring too late in the campaign season to accurately gauge voter recognition of challengers at the beginning of the campaign. Such informational gaps would frustrate attempts to conduct both cross-sectional and longitudinal studies.

In order to prevent such gaps, one would need to conduct separate surveys in each state and in each House district. By conducting your own survey, you would ensure that you are getting the information that you want at the time in the campaign when you want it. You would also ensure the type of continuity that makes the Gallup surveys of presidential approval so valuable. A single national survey would not provide the necessary number of respondents needed in each district for a reliable measure of that district's awareness of its House challenger, so the separate surveys would be appropriate.

Obviously, the expense required to mount this kind of operation is prohibitive. However, a research grant could provide someone with the opportunity to collect information from various existing polls. Though not perfect, this approach would yield enough data to perform new analyses, and serve as a first step toward a universal measure for this variable. The information gleaned from these polls also could be used in research focusing on other topics. In any event, it is an area worth pursuing.

Finally, the campaign spending research agenda would benefit by moving beyond elections between incumbents and challengers. The basic assumptions behind the voter recognition theory are transferable to open seat elections. Different variables

would need to be substituted for the incumbent variables in the spending equation, but this is fairly easily done. One would just need to determine what factors are critical to the success of one candidate over another in open seat races.

As for challenger political quality, it would affect spending in much the same way as it does for incumbents and challengers. The candidate who has a higher degree of recognition from the electorate should receive smaller benefits from campaign expenditures. Whereas incumbents are almost always considered to be the better known of the two candidates, in open seat elections this does not apply. In some ways, the absence of powerful incumbency advantages should allow spending to play an even more important role. However, other factors like party identification could fill the void. Studying open seat elections would provide answers to these questions, and provide researchers with a more complete picture of campaign spending.

CONCLUSION

The issue of campaign spending is as timely as it is important. Many citizens feel disconnected from the political process and distrustful of political leaders. One of the ways to remedy this problem is to make the political process more responsive to the needs of ordinary Americans. And one of the ways to make the system more responsive is to eliminate the disparity that exists in terms of the influence that wealthy Americans wield in comparison to ordinary Americans.

The fact that candidates benefit from spending means that they will try to acquire as much money as they can for their campaigns. This is a rational response. The fact that wealthy citizens gain access to candidates through donations means that they will be willing to give money to those campaigns. This is a rational response. The fact that both of these actions are rational means that they will continue unless a third party steps in and puts a halt to it.

The purpose of this dissertation is not to recommend policy prescriptions for campaign finance reform. I simply want to point out that some type of reform to the present system is needed, unless you happen to support the wealthy being able to drown out the voices of others through large donations. I do not. To paraphrase one of the Supreme Court justices during a recent case concerning the constitutionality of limiting campaign contributions, the First Amendment guarantees you the right to free speech, but not the right to have that speech amplified by a megaphone.

This issue has been debated for decades and will probably be debated for decades to come. The literature on campaign spending can serve to provide that debate with objective, relevant facts. It is my hope that this dissertation adds to the literature and informs the debate. If so, then I have fulfilled my duty as a scholar and an American.

END NOTES

- 1) For example, California has some state legislative districts that are bigger than U.S. House districts.

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APPENDIX A: DEFINITION OF VARIABLES

Table A.1 Definition of Variables

Name	Description
Incumbent Vote	The percentage of the two-party vote received by the incumbent.
Incumbent Spending	The amount of total campaign expenditures by the incumbent in real 1982-84 dollars.
Challenger Spending	The amount of total campaign expenditures by the challenger in real 1982-84 dollars.
Governor	A dichotomous variable coded 1 if the challenger was a governor.
Senator	A dichotomous variable coded 1 if the challenger was a senator.
U.S. Rep.	A dichotomous variable coded 1 if the challenger was a representative.
Major	A dichotomous variable coded 1 if the challenger was a statewide official or mayor of an important city.
Minor	A dichotomous variable coded 1 if the challenger was a state legislator or local official.
Celebrity	A dichotomous variable coded 1 if the challenger achieved prominence through activities other than holding elective office.
Controversy	A dichotomous variable coded 1 if incidents called the incumbent's honesty, judgment, or competence into question.
Scandal	A dichotomous variable coded 1 if the incumbent was alleged to have been involved in illegal activities.

Table A.1 cont.

Name	Description
Health	A dichotomous variable coded 1 if the incumbent's physical condition was an apparent political problem.
Unemployment	The unemployment rate for the state.
Unemployment*Party	The unemployment rate interacted with a variable that is coded 1 if the incumbent belonged to the governing party.
Party I.D.	An estimate of a state's/district's partisan make-up based on pooled survey data compiled by Erikson, Wright, and McIver (1993) and an estimation procedure developed by Ardoin and Garand (2000). The figure is the percentage point difference between the number of respondents identifying with the incumbent's party and those identifying with the opposite party.
Ideological Distance	A measure of the distance between the voting record of incumbents and the ideological make-up of their state/district. The voting record is culled from ADA and ACU ratings, while state/district ideology is measured using the same procedure as that for party identification.
Census	The population of the state/district as determined by the United States census.
Wealth	A dichotomous variable coded 1 if the challenger was considered wealthy.
Party	A dichotomous variable coded 1 for the Democratic party.

APPENDIX B: PARTISAN AND IDEOLOGICAL IDENTIFICATION

Table B.1 Partisan Identification in the United States

State	Rep.	Ind.	Dem.	Mean	N
Alabama	23.4%	32.2%	44.4%	21.1	2,419
Alaska	—	—	—	-11.0	—
Arizona	34.7	29.9	35.4	0.6	1,767
Arkansas	20.3	32.8	46.8	26.5	1,727
California	33.3	27.3	39.4	6.2	14,773
Colorado	32.6	38.8	28.6	-4.0	1,863
Conn.	24.5	43.2	32.3	7.8	2,269
Delaware	28.7	40.6	30.7	2.0	443
Florida	32.7	27.9	39.3	6.6	7,466
Georgia	21.0	31.0	48.0	27.0	3,814
Hawaii	—	—	—	7.0	—
Idaho	37.3	39.0	23.8	-13.5	724
Illinois	28.7	36.5	34.8	6.1	7,096
Indiana	32.9	36.0	31.2	-1.7	3,964
Iowa	32.4	38.1	29.6	-2.8	2,230
Kansas	38.3	32.7	29.0	-9.3	2,037
Kentucky	25.5	24.8	49.8	24.3	2,458
Louisiana	20.0	24.7	55.3	35.3	2,405
Maine	27.0	43.5	29.5	2.4	777
Maryland	24.2	29.4	46.4	22.2	2,996
Mass.	15.8	50.0	34.2	18.3	4,158
Michigan	29.8	38.3	31.9	2.1	6,806
Minnesota	27.3	35.8	36.8	9.5	3,181
Mississippi	27.0	29.2	43.8	16.7	1,416
Missouri	26.8	38.6	34.6	7.8	3,583
Montana	27.4	40.4	32.2	4.7	594
Nebraska	40.2	28.9	30.9	-9.3	1,252
Nevada	31.8	31.2	37.0	5.1	487
N.H.	31.8	46.3	21.8	-10.0	760
N.J.	27.5	39.9	32.6	5.1	5,252
N.M.	26.3	31.7	42.0	15.7	843
N.Y.	29.7	32.6	37.7	8.0	11,599
N.C.	27.6	25.8	46.6	19.0	3,885
N.D.	36.2	36.6	27.3	-8.9	495
Ohio	31.0	33.6	35.4	4.4	7,778
Oklahoma	29.9	19.2	50.8	20.9	2,115
Oregon	31.2	30.2	38.6	7.4	2,063
Penn.	34.8	26.8	38.4	3.7	8,710
R.I.	15.5	56.4	28.2	12.7	614
S.C.	27.5	33.2	39.2	11.7	2,304
S.D.	38.4	21.3	40.3	2.0	717
Tenn.	26.5	34.2	39.3	12.9	3,149
Texas	26.1	34.5	39.4	13.4	9,696
Utah	41.9	33.5	24.5	-17.4	966
Vermont	28.6	48.0	23.4	-5.1	448
Virginia	29.4	37.9	32.7	3.3	4,245
Washington	24.0	44.1	31.9	7.8	3,179
W. V.	28.6	22.7	48.7	20.1	1,559
Wisconsin	27.1	38.7	34.2	7.1	3,413
Wyoming	34.5	35.1	30.3	-4.2	333

Note: These percentages are derived from CBS/NYT national surveys conducted from 1976 to 1988.

Table B.2 Ideological Identification in the United States

State	Con.	Mod.	Lib.	Mean*	N
Alabama	40.5%	42.0%	17.5%	23.1	2,142
Alaska	—	—	—	25.0	—
Arizona	37.4	43.4	19.2	18.2	1,578
Arkansas	36.8	44.6	18.6	18.3	1,528
California	31.6	43.1	25.4	6.2	13,369
Colorado	31.3	46.1	22.6	8.6	1,724
Conn.	29.4	45.6	25.0	4.4	2,095
Delaware	32.0	48.2	19.8	12.2	409
Florida	37.1	42.9	20.0	17.1	6,735
Georgia	36.6	44.6	18.8	17.7	3,443
Hawaii	—	—	—	6.0	—
Idaho	42.5	42.9	14.6	27.9	666
Illinois	32.5	45.1	22.4	10.1	6,456
Indiana	36.0	44.7	19.3	16.7	3,510
Iowa	33.0	47.5	19.5	13.5	1,980
Kansas	36.5	42.9	20.6	15.9	1,810
Kentucky	33.7	45.8	20.5	13.2	2,103
Louisiana	40.0	43.0	17.0	23.0	2,119
Maine	36.1	42.6	21.3	14.7	685
Maryland	30.4	44.8	24.8	5.7	2,723
Mass.	28.2	44.5	27.3	0.8	3,704
Michigan	31.6	45.6	22.8	8.8	6,135
Minnesota	33.2	46.5	20.4	12.8	2,942
Mississippi	41.2	43.0	15.8	25.4	1,223
Missouri	34.4	46.7	18.9	15.5	3,167
Montana	34.3	42.5	23.2	11.1	551
Nebraska	37.5	43.7	18.8	18.7	1,128
Nevada	29.6	41.0	29.4	0.2	446
N.H.	34.2	44.5	21.3	12.8	685
N.J.	30.1	43.2	26.7	3.4	4,833
N.M.	36.2	43.6	20.2	16.0	746
N.Y.	30.4	42.4	27.3	3.1	10,619
N.C.	37.8	45.1	17.1	20.7	3,326
N.D.	40.5	45.6	13.9	26.6	447
Ohio	32.4	45.2	22.3	10.1	7,013
Oklahoma	42.0	43.4	14.7	27.3	1,866
Oregon	32.8	42.3	24.9	7.9	1,890
Penn.	33.0	44.5	22.4	10.6	7,783
R.I.	29.0	44.1	26.9	2.1	562
S.C.	39.8	41.8	18.4	21.4	2,128
S.D.	38.4	47.2	14.4	24.1	627
Tenn.	36.6	43.3	20.1	16.6	2,764
Texas	40.6	42.0	17.4	23.2	8,745
Utah	44.1	39.7	16.1	28.0	868
Vermont	34.8	41.7	23.5	11.4	405
Virginia	37.0	43.9	19.1	17.9	3,948
Washington	29.2	47.5	23.3	5.9	2,915
W.V.	32.2	44.8	23.0	9.2	1,348
Wisconsin	32.6	45.4	22.1	10.5	3,113
Wyoming	39.7	38.4	21.9	17.8	292

* Since none of the states have a positive number, interpretation is made easier by simply dropping the negative sign. Thus, states with a higher number are ideologically more conservative.

Note: These percentages are derived from CBS/NYT surveys from 1976 to 1988.

APPENDIX C: INCUMBENT CONTROVERSY OR SCANDAL

Table C.1 House Campaigns Involving Incumbent Controversy or Scandal, 1974-94

Year	State	District	Categorization	Name/Party
1974	Arkansas	2	controversy	Wilbur Mills (D)
1974	Idaho	1	controversy	Steven Symms (R)
1974	Indiana	2	controversy	Earl Landgrebe (R)
1974	Indiana	11	controversy	William Hudnut (R)
1974	Kentucky	4	controversy	M. G. Synder (R)
1974	Massachusetts	4	controversy	Robert Drinan (D)
1974	Minnesota	3	scandal	Bill Frenzel (R)
1974	New Jersey	9	controversy	Henry Helstoski (D)
1974	New Jersey	13	controversy	Joseph Maraziti (R)
1974	New York	3	scandal	Angelo Roncallo (R)
1974	Ohio	9	controversy	Thomas Ashley (D)
1974	Oklahoma	1	controversy	James Jones (D)
1974	Pennsylvania	9	controversy	E. G. Shuster (R)
1976	California	4	scandal	Robert Leggett (D)
1976	California	11	controversy	Leo Ryan (D)
1976	Florida	1	controversy	Robert Sikes (D)
1976	Idaho	2	scandal	George Hansen (R)
1976	Kansas	2	controversy	Martha Keys (D)
1976	New Jersey	9	scandal	Henry Helstoski (D)
1976	Oklahoma	1	scandal	James Jones (D)
1976	Pennsylvania	11	controversy	Daniel Flood (D)
1976	South Carolina	6	controversy	John Jenrette (D)
1976	Texas	14	controversy	John Young (D)
1976	Utah	2	scandal	Allan Howe (D)
1978	California	14	scandal	John McFall (D)
1978	California	25	scandal	Edward Roybal (D)
1978	California	31	scandal	Charles Wilson (D)
1978	Florida	12	scandal	J. Herbert Burke (R)
1978	Idaho	2	controversy	George Hansen (R)
1978	Indiana	3	controversy	John Brademas (D)
1978	Michigan	13	scandal	Charles Diggs Jr. (D)
1978	New Jersey	15	controversy	Edward Patten (D)
1978	New York	29	controversy	Edward Pattison (D)
1978	Ohio	19	controversy	Charles Carney (D)
1978	Pennsylvania	4	scandal	Joshua Eilberg (D)
1978	Pennsylvania	11	scandal	Daniel Flood (D)
1978	Rhode Island	1	controversy	Fernand Germain (D)

Table C.1 cont.

Year	State	District	Categorization	Name/Party
1978	Texas	5	controversy	Jim Mattox (D)
1978	Washington	7	controversy	John Cunningham (R)
1978	Wisconsin	1	controversy	Les Aspin (D)
1980	Iowa	6	scandal	Berkley Bedell (D)
1980	Maryland	1	scandal	Robert Bauman (R)
1980	Massachusetts	6	scandal	Nicholas Mavroules (D)
1980	Michigan	10	scandal	Don Albosta (D)
1980	Mississippi	4	scandal	Jon Hinson (R)
1980	Missouri	10	controversy	Bill Burlison (D)
1980	New Jersey	4	scandal	Frank Thompson (D)
1980	New York	17	scandal	John Murphy (D)
1980	Pennsylvania	3	scandal	Raymond Lederer (D)
1980	Pennsylvania	12	scandal	John Murtha (D)
1980	South Carolina	6	scandal	John Jenrette Jr. (D)
1982	California	15	controversy	Tony Coelho (D)
1982	Delaware	1	controversy	Thomas Evans Jr. (R)
1982	Idaho	1	controversy	Larry Craig (R)
1982	Idaho	2	controversy	George Hansen (R)
1982	North Carolina	7	controversy	Charlie Rose (D)
1984	Idaho	2	scandal	George Hansen (R)
1984	Illinois	19	controversy	Daniel Crane (R)
1984	Massachusetts	10	controversy	Gerry Studds (D)
1984	Ohio	1	controversy	Thomas Luken (D)
1986	California	41	controversy	Bill Lowery (R)
1986	New Mexico	3	controversy	Bill Richardson (D)
1986	New York	27	controversy	George Wortley (R)
1986	North Carolina	7	controversy	Charlie Rose (D)
1986	Pennsylvania	15	controversy	Don Ritter (R)
1986	Rhode Island	1	scandal	Fernand Germain (D)
1986	Tennessee	5	scandal	Bill Boner (D)
1986	Texas	14	controversy	Mac Sweeney (R)
1988	California	44	controversy	Jim Bates (D)
1988	Florida	4	controversy	Bill Chappell Jr. (D)
1988	Georgia	4	scandal	Pat Swindall (R)
1988	Maryland	1	controversy	Roy Dyson (D)
1988	Missouri	8	controversy	Bill Emerson (R)
1988	Oklahoma	1	controversy	James Inhofe (R)

Table C.1 cont.

Year	State	District	Categorization	Name/Party
1990	Alabama	2	controversy	Bill Dickinson (R)
1990	California	17	controversy	Charles Pashayan (R)
1990	California	44	controversy	Jim Bates (D)
1990	Georgia	10	controversy	Doug Barnard Jr. (D)
1990	Illinois	11	controversy	Frank Annunzio (D)
1990	Maryland	1	controversy	Roy Dyson (D)
1990	Minnesota	7	controversy	Arlan Strangeland (R)
1990	Rhode Island	1	controversy	Ronald Machtley (R)
1992	Colorado	2	controversy	David Skaggs (D)
1992	Connecticut	5	controversy	Gary Franks (R)
1992	Illinois	20	controversy	Richard Durbin (D)
1992	Indiana	7	controversy	John Myers (R)
1992	Indiana	8	controversy	Frank McCloskey (D)
1992	Iowa	3	controversy	Jim Ross Lightfoot (R)
1992	Kansas	4	controversy	Dan Glickman (D)
1992	Massachusetts	3	controversy	Joseph Early (D)
1992	Massachusetts	6	scandal	Nicholas Mavroules (D)
1992	Michigan	9	controversy	Dale Kildee (D)
1992	Michigan	10	controversy	David Bonior (D)
1992	Minnesota	6	controversy	Gerry Sikorski (D)
1992	Missouri	5	controversy	Alan Wheat (D)
1992	New Hampshire	2	controversy	Dick Swett (D)
1992	New Jersey	9	controversy	Robert Torricelli (D)
1992	New York	1	controversy	George Hochbrueckner (D)
1992	New York	2	controversy	Thomas Downey (D)
1992	New York	5	controversy	Gary Ackerman (D)
1992	New York	7	controversy	Thomas Manton (D)
1992	North Carolina	3	controversy	Martin Lancaster (D)
1992	Ohio	6	controversy	Bob McEwen (R)
1992	Ohio	10	controversy	Mary Rose Oakar (D)
1992	Pennsylvania	3	controversy	Robert Borski (D)
1992	Pennsylvania	8	controversy	Peter Kostmayer (D)
1992	Pennsylvania	19	controversy	Bill Goodling (R)
1992	Pennsylvania	20	controversy	Austin Murphy (D)
1992	Rhode Island	1	controversy	Ronald Machtley (R)
1992	Texas	2	controversy	Charles Wilson (D)
1992	Texas	12	controversy	Pete Geren (D)

Table C.1 cont.

Year	State	District	Categorization	Name/Party
1992	Texas	16	controversy	Ronald Coleman (D)
1992	Texas	23	controversy	Albert Bustamante (D)
1992	Texas	25	controversy	Michael Andrews (D)
1992	Wisconsin	6	controversy	Thomas Petri (R)
1994	California	43	scandal	Ken Calvert (R)
1994	Nevada	1	controversy	James Bilbray (D)
1994	Texas	14	controversy	Greg Laughlin (D)

Table C.2 Senate Campaigns Involving Incumbent Controversy or Scandal, 1974-94

Year	State	Categorization	Name/Party
1974	Alaska	controversy	Mike Gravel (D)
1974	Colorado	controversy	Peter Dominick (R)
1974	Washington	controversy	Warren Magnuson (D)
1976	Indiana	controversy	Vance Hartke (D)
1976	Maryland	controversy	Glenn Beall Jr. (R)
1976	Nevada	controversy	Howard Cannon (D)
1976	New Mexico	scandal	Joseph Montoya (D)
1978	Massachusetts	scandal	Edward Brooke (R)
1978	Michigan	controversy	Robert Griffin (R)
1978	Texas	controversy	John Tower (R)
1978	West Virginia	controversy	Jennings Randolph (D)
1980	Georgia	controversy	Herman Talmadge (D)
1980	Kentucky	scandal	Wendell Ford (D)
1980	Missouri	controversy	Thomas Eagleton (D)
1984	Iowa	scandal	Roger Jepsen (R)
1984	Oregon	controversy	Mark Hatfield (R)
1986	Idaho	controversy	Steven Symms (R)
1986	New York	controversy	Alfonse D'Amato (R)
1986	North Dakota	controversy	Mark Andrews (R)
1986	Ohio	scandal	John Glenn (D)
1986	South Dakota	controversy	James Abdnor (R)
1986	Wisconsin	scandal	Bob Kasten (R)
1988	Minnesota	controversy	Dave Durenberger (R)
1990	Delaware	controversy	Joseph Biden (D)
1990	Illinois	controversy	Paul Simon (D)
1992	Arizona	controversy	John McCain (R)
1992	New York	controversy	Alfonse D'Amato (R)
1992	Ohio	controversy	John Glenn (D)
1994	Massachusetts	controversy	Edward Kennedy (D)
1994	Montana	controversy	Conrad Burns (R)
1994	Texas	scandal	Kay Bailey Hutchison (R)
1994	Virginia	controversy	Chuck Robb (D)

APPENDIX D: CELEBRITY CHALLENGERS

Table D.1 Celebrity Challengers in House Campaigns, 1974-94

Year	State & District	Reason for Celebrity	Name/Party
1974	Indiana 4	member of prominent family	Walter Helmke (R)
1974	Nevada 1	member of prominent family	James Santini (D)
1974	New York 29	member of prominent family	Edward Pattison (D)
1974	North Carolina 6	war hero & college athlete	R.S. Ritchie (R)
1974	North Carolina 8	television performer	W.G. Hefner (D)
1976	Colorado 2	television personality	Ed Scott (R)
1976	Missouri 5	addressed Rep. Convention	Joanne Collins (R)
1976	South Carolina 5	professional athlete	Robert Richardson (R)
1976	Vermont 1	nationally known attorney	John Burgess (D)
1978	Alabama 1	college athlete	L.W. Noonan (D)
1978	California 27	Gregory Peck's son	Carey Peck (D)
1978	Colorado 2	television personality	Ed Scott (R)
1978	Missouri 2	television journalist	Robert Chase (R)
1978	Virginia 1	son of decorated soldier	Lew Puller (D)
1980	California 27	Gregory Peck's son	Carey Peck (D)
1980	California 43	leader of state KKK	Tom Metzger (D)
1980	Connecticut 4	noted scientist	John Phillips (D)
1980	Indiana 3	member of prominent family	John Hiler (R)
1980	New York 23	noted businessman	Andrew Albanese (R)
1980	New York 39	noted civic leader	James Abdella (R)
1980	Ohio 2	television journalist	Tom Atkins (R)
1980	Ohio 12	television personality	Robert Shamansky (D)
1982	California 32	brother of U.S. Rep	Brian Lungren (R)
1982	Florida 19	television journalist	Glenn Rinker (R)
1982	Massachusetts 10	noted businessman	John Conway (R)
1982	North Carolina 3	decorated soldier	Eugene McDaniel (R)
1984	California 27	professional athlete	Robert Scribner (R)
1984	Delaware 1	wife of governor	Elise du Pont (R)
1984	Missouri 2	radio personality	John Buechner (R)
1984	Nebraska 2	member of prominent family	Tom Cavanaugh (D)
1984	Ohio 9	television journalist	Frank Venner (R)
1986	Colorado 3	Olympic gold medalist	Ben N. Campbell (D)
1986	Georgia 4	actor	Ben Jones (D)
1986	Maryland 2	R.F.K.'s daughter	Kathleen K. Townsend (D)
1986	Missouri 8	led demonstration	Wayne Cryts (D)
1986	West Virginia 3	television journalist	Tim Sharp (R)

Table D.1 cont.

Year	State & District	Reason for Celebrity	Name/Party
1988	Pennsylvania 15	member of prominent family	Ed Reibman (D)
1988	Georgia 4	actor	Ben Jones (D)
1988	Tennessee 3	television personality	Harold Coker (R)
1990	Alaska 1	part of Exxon Valdez event	John Devens (D)
1990	California 37	actor	Ralph Waite (D)
1990	Missouri 8	member of prominent family	Russ Carnahan (D)
1990	West Virginia 2	college athlete	Oliver Luck (R)
1992	California 42	flew plane around world	Dick Rutan (R)
1992	Minnesota 6	television journalist	Rod Grams (R)
1992	New Jersey 4	member of prominent family	Brian Hughes (D)
1994	Arizona 6	sportscaster	J. D. Hayworth (R)
1994	Florida 5	drag-racing icon	Don Garlits (R)
1994	Nevada 2	best-selling author	Janet Greeson (D)
1994	North Carolina 3	son of former U.S. Rep	Walter Jones Jr. (R)
1994	North Carolina 11	television journalist	Maggie P. Lauterer (D)

Table D.2 Celebrity Challengers in Senate Campaigns, 1974-94

Year	State	Reason for Celebrity	Name/Party
1974	South Dakota	former Vietnam P.O.W.	Leo Thorsness (R)
1976	California	prominent academic	S.I. Hayakawa (R)
1976	New Mexico	astronaut	Harrison Schmitt (R)
1976	New York	former ambassador to U.N.	D.P. Moynihan (D)
1984	Michigan	astronaut	Jack Lousma (R)
1986	Wisconsin	executive director of NFLPA	Ed Garvey (D)
1988	Minnesota	son of Hubert Humphrey	Hubert Humphrey III (D)
1988	Nebraska	"dashing" war hero	Robert Kerrey (D)
1988	New Jersey	football star	Pete Dawkins (R)
1994	Virginia	involvement in Iran-Contra	Oliver North (R)

APPENDIX E: REDUCED FORM EQUATIONS

Table E.1 Reduced Form Regression for Incumbent Spending in Senate Elections

Dependent Variable: Incumbent Spending			
Independent Variables	b	B	T
Governor	.284	.063	1.20
Senator	-.414	-.037	-.73
U.S. Rep	.322	.130	2.33***
Major	.293	.101	1.84**
Minor	-.096	-.044	-.79
Celebrity	.424	.083	1.60*
Controversy	.228	.069	1.38*
Scandal	-.474	-.078	-1.52*
Unemployment	-.052	-.116	-2.18**
Unemploy*Party	.015	.058	.97
Party I.D.	.127	.077	1.19
Ideological Distance	-.036	-.028	-1.28*
Census	-.090	-.009	-9.25***
Wealth	.102	.121	.84
Party	-.275	-.145	-2.47***
R-Squared=.49			
Note: *<.10 **<.05 ***<.01 N=279			

Table E.2 Reduced Form Regression for Challenger Spending in Senate Elections

Dependent Variable: Challenger Spending			
Independent Variables	b	B	T
Governor	1.688	.257	4.72***
Senator	1.243	.075	1.46*
U.S. Rep	1.241	.341	5.94***
Major	1.407	.333	5.86***
Minor	.269	.084	1.46*
Celebrity	1.308	.175	3.26***
Controversy	.543	.112	2.16**
Scandal	-.278	-.031	-.59
Unemployment	-.044	-.067	-1.23
Unemploy*Party	.005	.015	.24
Party I.D.	.056	.089	1.60*
Ideological Distance	.010	.012	1.11
Census	-.064	-.229	-4.33***
Wealth	.706	.200	3.84***
Party	.023	.008	.14
R-Squared=.42			
N=279			
Note: *<.10 **<.05 ***<.01			

Table E.3 Reduced Form Regression for Incumbent Spending in House Elections

Dependent Variable: Incumbent Spending			
Independent Variables	b	B	T
Governor	.371	.010	.69
Senator	.892	.018	1.17
U.S. Rep	.731	.098	6.34***
Major	.517	.135	8.63***
Minor	.374	.154	9.83***
Celebrity	.421	.062	4.00***
Controversy	.428	.079	5.10***
Scandal	.174	.019	1.27
Health	.043	.002	.16
Party I.D.	.006	.109	6.59***
Ideological Distance	.050	.047	1.08
Population	-4.660	-.260	-16.72***
Wealth	.241	.087	5.58***
Party	-.054	-.032	-1.96**
R-Squared=.48			
N=3567			
Note: *<.10 **<.05 ***<.01			

Table E.4 Reduced Form Regression for Challenger Spending in House Elections

Dependent Variable: Challenger Spending			
Independent Variables	b	B	T
Governor	.334	.006	.39
Senator	1.259	.016	1.05
U.S. Rep	1.582	.139	8.67***
Major	1.249	.213	13.12***
Minor	.933	.247	15.22***
Celebrity	1.171	.113	7.05***
Controversy	.829	.101	6.25***
Scandal	.860	.061	3.84***
Health	.727	.027	1.71**
Party I.D.	.015	.139	8.23***
Ideological Distance	.086	.018	1.30*
Population	-2.342	-.008	-.51
Wealth	.660	.152	9.43***
Party	.087	.032	1.91**
R-Squared=.45			
N=3186			
Note: *<.10 **<.05 ***<.01			

APPENDIX F: SAMPLE STATISTICS

Table F.1 Sample Statistics for Variables in the Model--House

Variable	Mean	Standard Deviation	Minimum	Maximum
Incumbent Vote %	65.18	10.25	26.0	96.4
Incumbent \$	279,890	220,402	0	2,384,676
Challenger \$	123,576	169,361	0	2,422,318
Incumbent \$ PV	.55	.41	.00	5.10
Challenger \$ PV	.25	.33	.00	4.62
Party I.D.	10.31	13.18	-16.70	35.40
Census	508,156	45,813	302,173	799,065
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Variable	Percentage	Number		
Governor	.1	2		
Senator	.0	1		
U.S. Rep.	1.2	44		
Major	4.8	173		
Minor	13.1	470		
Celebrity	1.5	53		
Controversy	2.4	86		
Scandal	.9	31		
Health	.2	8		
Wealth	9.8	349		

Table F.2 Sample Statistics for Variables in the Model--Senate

Variable	Mean	Standard Deviation	Minimum	Maximum
Incumbent Vote %	59.13	9.36	37.50	83.20
Incumbent \$	2,453,085	2,256,911	0	16,282,540
Challenger \$	1,316,491	2,025,352	0	20,222,466
Incumbent \$ PV	.94	.90	.00	5.97
Challenger \$ PV	.47	.65	.00	6.11
Party I.D.	6.51	10.48	-17.4	27.0
Unemployment	6.57	2.10	2.20	15.50
Census	4,560,000	4,930,000	470,000	29,730,000
Variable	Percentage	Number		
Governor	4.6	13		
Senator	.7	2		
U.S. Rep.	17.5	49		
Major	12.1	34		
Minor	25.0	70		
Celebrity	3.6	10		
Controversy	8.9	25		
Scandal	2.5	7		
Health	1.8	5		
Wealth	18.9	53		

VITA

Nicholas Chad Long was born in Gadsden, Alabama on April 16, 1971. Raised in the South, he developed a passion for politics as a young child. He cast his first ballot for Jimmy Carter in a 1980 mock presidential election at his elementary school. He later achieved glory by winning an election for governor in the eighth grade. After realizing that his dream of becoming a professional tennis player was not meant to be, he enrolled at Northeast Louisiana University. He earned a bachelor's degree from that institution in 1993. He remained in his home state for graduate school. He received a master's degree in 1998 and a doctorate in 2001 from Louisiana State University.

